



## SECTION 8

# ENCAPSULATED DISTRIBUTION TRANSFORMERS

## Commercial & Industrial Single Phase and Three Phase

### **HPS Fortress™ Commercial Encapsulated Transformers**

Applications & Features .....	190
Single Phase Standard Specification .....	192
Single Phase Selection Tables .....	193
Three Phase Standard Specifications .....	196
Three Phase Selection Tables .....	197

### **HPS TITAN® Industrial Encapsulated Transformers**

Applications .....	199
Features & Benefits .....	199
Single Phase Standard Specifications .....	200
Single Phase Selection Tables .....	201
Three Phase Standard Specifications .....	203
Three Phase Selection Tables .....	204
Enclosure Dimensional Drawings .....	228
Accessories - Enclosure Mounting Kits, Anti-Vibration Pads & Isolators .....	238
Wiring Schematic Drawings .....	243

## HPS Fortress Features

HPS Fortress is an innovative design that provides the ideal solution for commercial applications where **quality, ease of installation, and low cost** are key.

All units are encapsulated with electrical grade silica sand and resin compounds, which completely enclose the core and coil to seal out moisture, airborne contaminants and eliminates corrosion and deterioration.

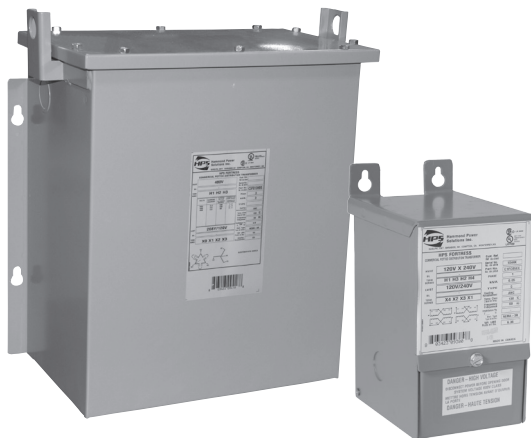
### Standard Features

Features	Single Phase	Three Phase
<b>Voltage Groups</b>	9 standard voltage groups	8 standard voltage groups
<b>Ratings</b>	From 50VA to 37.5kVA	From 2kVA to 75kVA
<b>Shield</b>	Standard shield from 750VA and up	Standard shield on all units
<b>Frequency</b>	60 Hz (50Hz standard on four voltage groups)	60Hz standard on all voltage groups
<b>Connection</b>	Standard via copper leads	
<b>Enclosure</b>	Type 3R	Type 3R (type 4/12 with optional gasket kit installed)
<b>Quality Design</b>	All units are encapsulated with electrical grade silica sand and resin compounds, which completely enclose the core and coil to seal out moisture, airborne contaminants and eliminates corrosion and deterioration.	
<b>Conduit Knockouts</b>	For rear and side entry into an easily accessible and roomy wiring compartment (no knock-outs on Stainless Steel enclosures).	
<b>Installation</b>	Wall mounting up to 25kVA, optional wall mounting bracket available on 37.5kVA. Wall mounting template supplied.	Wall mounting up to 9kVA, optional wall mounting bracket available on 15kVA, 30kVA and 45kVA. Wall mounting template supplied.
<b>Warranty</b>	All HPS standard catalog encapsulated transformers come with a 10 year limited* warranty	

\*(Please refer to the HPS Warranty on page 26 for full details.)

SECTION 8

Inexpensive  
& easy

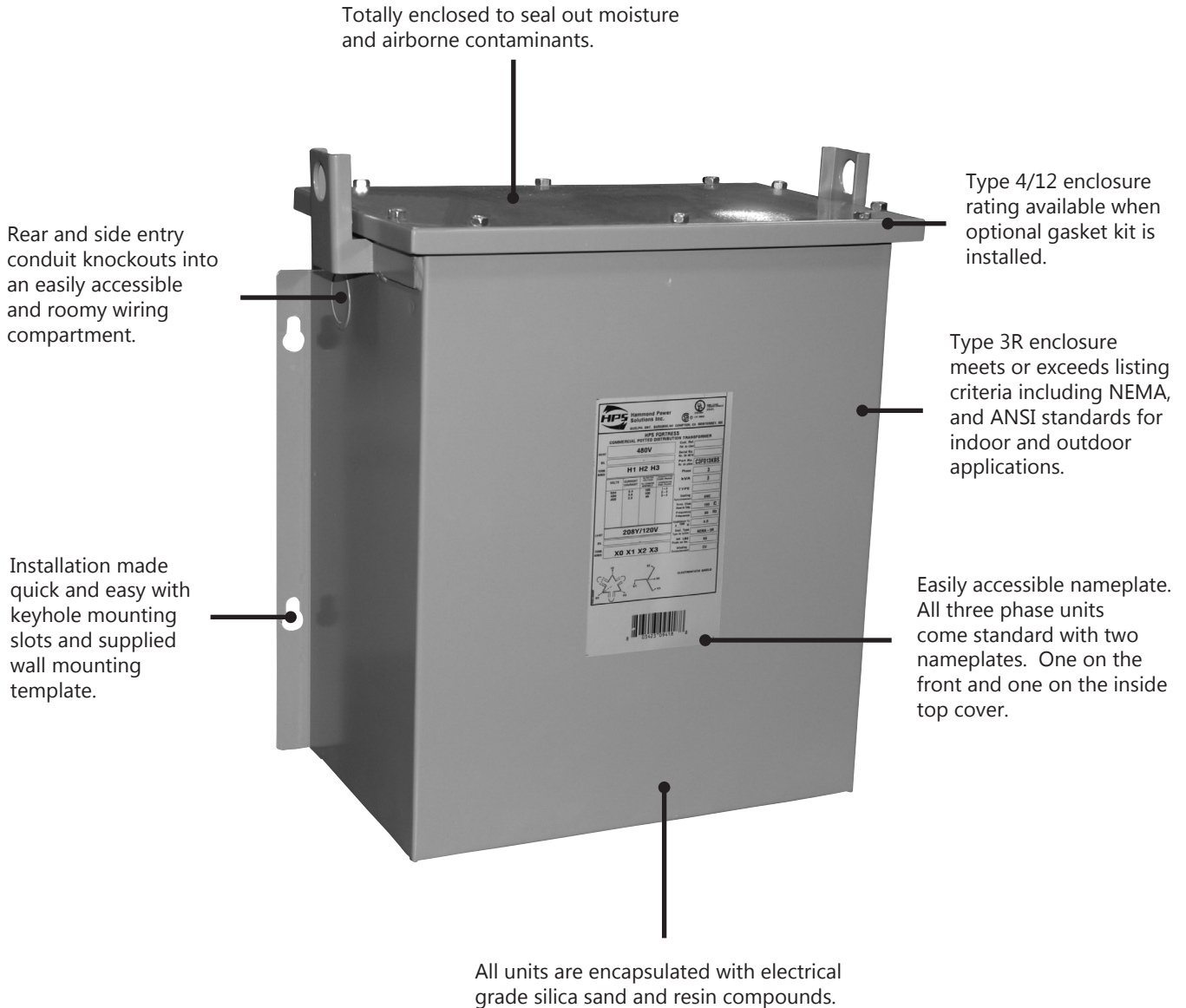


### Applications

- Shopping Centers
- Schools
- Sports Complexes
- Office Buildings
- Lighting



## HPS Fortress Features continued...



**Note:** Picture displayed above is a standard three phase HPS Fortress units.



## HPS FORTRESS™

### COMMERCIAL ENCAPSULATED DISTRIBUTION TRANSFORMERS

#### SINGLE PHASE STANDARD SPECIFICATIONS



**0.50 TO 1 KVA**



**1.5 TO 37.5 KVA**



	<b>.05 kVA to 1 kVA</b>	<b>1.5 kVA to 37.5 kVA</b>
UL Listed	File: E50394	File: E50394
CSA Certified	File: LR3902	File: LR3902
Frequency	60 Hz (50/60 Hz)	60 Hz (50/60 Hz)
Insulation System	130°C (80°C rise) standard on all units	180°C (115°C rise) standard on all units.
Electrostatic Shield	Standard on 0.75 kVA and up.	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	Type 3R	Type 3R
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%.	Typically 1 to 5%.
Mounting	Standard Wall Mounting.	Standard Wall Mounting up to 25kVA. Optional wall mounting kit for 37.5kVA units. Lifting provisions standard on units 5 kVA and up.
Sound Level	Meets NEMA ST-20 standards.	Meets NEMA ST-20 standards

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

# SECTION 8

# COMMERCIAL ENCAPSULATED

## SINGLE PHASE, NEMA 3R STYLE ENCLOSURE



120 X 240 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			
0.05	C1FC05EE	NQ0	3.75	5.25	7.25	7	W	SCD1
0.10	C1FC10EE	NQ0	3.75	5.25	7.25	7	W	SCD1
0.15	C1FC15EE	NQ0	3.75	5.25	7.25	8	W	SCD1
0.25	C1FC25EE	NQ0	3.75	5.25	7.25	9	W	SCD1
0.35	C1FC35EE	NQ1	4.50	5.75	7.25	15	W	SCD1
0.50	C1FC50EE	NQ1	4.50	5.75	7.25	16	W	SCD1
0.75	C1FC75EES	NQ2	5.00	4.75	9.25	23	W	SCD1
1	C1F1C0EES	NQ3	5.88	5.50	10.50	24	W	SCD1
1.5	C1F1C5EES	NQ3	5.88	5.50	10.50	33	W	SCD1
2	C1F002EES	NQ4	7.00	6.50	11.75	42	W	SCD1
3	C1F003EES	NQ4	7.00	6.50	11.75	55	W	SCD1
5	C1F005EES	NQ5	10.00	7.75	17.25	96	W	SCD1
7.5	C1F007EES	NQ6A	12.25	9.25	17.63	148	W	SCD2
10	C1F010EES	NQ6	12.25	9.25	20.88	178	W	SCD2

208 X 416 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			
0.05	C1FC05GE	NQ0	3.75	5.25	7.25	7	W	SCD1
0.10	C1FC10GE	NQ0	3.75	5.25	7.25	7	W	SCD1
0.15	C1FC15GE	NQ0	3.75	5.25	7.25	8	W	SCD1
0.25	C1FC25GE	NQ0	3.75	5.25	7.25	9	W	SCD1
0.35	C1FC35GE	NQ1	4.50	5.75	7.25	15	W	SCD1
0.50	C1FC50GE	NQ1	4.50	5.75	7.25	16	W	SCD1
0.75	C1FC75GES	NQ2	5.00	4.75	9.25	23	W	SCD1
1	C1F1C0GES	NQ3	5.88	5.50	10.50	24	W	SCD1
1.5	C1F1C5GES	NQ3	5.88	5.50	10.50	33	W	SCD1
2	C1F002GES	NQ4	7.00	6.50	11.75	42	W	SCD1
3	C1F003GES	NQ4	7.00	6.50	11.75	55	W	SCD1
5	C1F005GES	NQ5	10.00	7.75	17.25	96	W	SCD1
7.5	C1F007GES	NQ6A	12.25	9.25	17.63	148	W	SCD2
10	C1F010GES	NQ6	12.25	9.25	20.88	178	W	SCD2

120/208/240/277 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			
0.05	C1FC05WE	NQ0	3.75	5.25	7.25	7	W	SCD41
0.10	C1FC10WE	NQ0	3.75	5.25	7.25	7	W	SCD41
0.15	C1FC15WE	NQ0	3.75	5.25	7.25	8	W	SCD41
0.25	C1FC25WE	NQ1	4.50	5.75	7.25	10	W	SCD41
0.35	C1FC35WE	NQ2	5.00	4.75	9.25	17	W	SCD41
0.50	C1FC50WE	NQ2	5.00	4.75	9.25	25	W	SCD41
0.75	C1FC75WES	NQ2	5.00	4.75	9.25	23	W	SCD41
1	C1F1C0WES	NQ3	5.88	5.50	10.50	24	W	SCD41
1.5	C1F1C5WES	NQ3	5.88	5.50	10.50	37	W	SCD41
2	C1F002WES	NQ4	7.00	6.50	11.75	52	W	SCD41
3	C1F003WES	NQ5	10.00	7.75	17.25	65	W	SCD2
5	C1F005WES	NQ5	10.00	7.75	17.25	108	W	SCD2
7.5	C1F007WES	NQ6	12.25	9.25	20.88	171	W	SCD2
10	C1F010WES	NQ6	12.25	9.25	20.88	183	W	SCD2

SECTION 8



## SINGLE PHASE, NEMA 3R STYLE ENCLOSURE



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			
0.05	C1FC05LE	NQ0	3.75	5.25	7.25	7	W	SCD1
0.10	C1FC10LE	NQ0	3.75	5.25	7.25	7	W	SCD1
0.15	C1FC15LE	NQ0	3.75	5.25	7.25	8	W	SCD1
0.25	C1FC25LE	NQ1	4.50	5.75	7.25	9	W	SCD1
0.35	C1FC35LE	NQ1	4.50	5.75	7.25	15	W	SCD1
0.50	C1FC50LE	NQ1	4.50	5.75	7.25	16	W	SCD1
0.75	C1FC75LES	NQ2	5.00	4.75	9.25	23	W	SCD1
1	C1F1C0LES	NQ3	5.88	5.50	10.50	24	W	SCD1
1.5	C1F1C5LES	NQ3	5.88	5.50	10.50	33	W	SCD1
2	C1F002LES	NQ4	7.00	6.50	11.75	42	W	SCD1
3	C1F003LES	NQ4	7.00	6.50	11.75	55	W	SCD1
5	C1F005LES	NQ5	10.00	7.75	17.25	115	W	SCD1
7.5	C1F007LES	NQ6A	12.25	9.25	17.63	148	W	SCD2
10	C1F010LES	NQ6	12.25	9.25	20.88	179	W	SCD2
15	C1F015LES	NQ7	14.50	10.75	21.38	265	W	SCD2
25	C1F025LES	NQ8	14.50	10.75	27.38	385	W	SCD2
37.5	C1F037LES	NQS10	21.88	18.50	31.00	598	F or W*	SCD2

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.

277 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			
0.05	C1FC05CE	NQ0	3.75	5.25	7.25	7	W	SCD4
0.10	C1FC10CE	NQ0	3.75	5.25	7.25	7	W	SCD4
0.15	C1FC15CE	NQ0	3.75	5.25	7.25	8	W	SCD4
0.25	C1FC25CE	NQ0	3.75	5.25	7.25	9	W	SCD4
0.35	C1FC35CE	NQ2	5.00	4.75	8.25	15	W	SCD4
0.50	C1FC50CE	NQ2	5.00	4.75	8.25	15	W	SCD4
0.75	C1FC75CES	NQ2	5.00	4.75	8.25	23	W	SCD4
1	C1F1C0CES	NQ3	5.88	5.50	10.50	24	W	SCD4
1.5	C1F1C5CES	NQ3	5.88	5.50	10.50	33	W	SCD4
2	C1F002CES	NQ4	7.00	6.50	11.75	42	W	SCD4
3	C1F003CES	NQ4	7.00	6.50	11.75	55	W	SCD4
5	C1F005CES	NQ5	10.00	7.75	17.25	115	W	SCD4
7.5	C1F007CES	NQ6A	12.25	9.25	17.63	148	W	SCD2
10	C1F010CES	NQ6	12.25	9.25	20.88	178	W	SCD2

277/480 Primary Volts

208/277 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			
0.05	C1FC05HR	NQ0	3.75	5.25	7.25	7	W	SCD42
0.10	C1FC10HR	NQ0	3.75	5.25	7.25	8	W	SCD42
0.15	C1FC15HR	NQ0	3.75	5.25	7.25	11	W	SCD42
0.25	C1FC25HR	NQ1	4.50	5.75	7.25	12	W	SCD42
0.35	C1FC35HR	NQ2	5.00	4.75	9.25	15	W	SCD42
0.50	C1FC50HR	NQ2	5.00	4.75	9.25	18	W	SCD42
0.75	C1FC75HRS	NQ3	5.88	5.50	10.50	25	W	SCD42
1	C1F1C0HRS	NQ3	5.88	5.50	10.50	31	W	SCD42
1.5	C1F1C5HRS	NQ4	7.00	6.50	11.75	39	W	SCD42
2	C1F002HRS	NQ4	7.00	6.50	11.75	54	W	SCD42
3	C1F003HRS	NQ5	10.00	7.75	17.25	80	W	SCD43
5	C1F005HRS	NQ5	10.00	7.75	17.25	156	W	SCD43
7.5	C1F007HRS	NQ6	12.25	9.25	20.88	188	W	SCD43
10	C1F010HRS	NQ6	12.25	9.25	20.88	179	W	SCD43



## SINGLE PHASE, NEMA 3R STYLE ENCLOSURE



347/380 Primary Volts **CE** 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			
0.05	C1FC05JE	NQ0	3.75	5.25	7.25	7	W	SCD33
0.10	C1FC10JE	NQ0	3.75	5.25	7.25	7	W	SCD33
0.15	C1FC15JE	NQ0	3.75	5.25	7.25	8	W	SCD33
0.25	C1FC25JE	NQ0	3.75	5.25	7.25	9	W	SCD33
0.35	C1FC35JE	NQ1	4.50	5.75	7.25	14	W	SCD33
0.50	C1FC50JE	NQ1	4.50	5.75	7.25	14	W	SCD33
0.75	C1FC75JES	NQ2	5.00	4.75	9.25	23	W	SCD33
1	C1F1C0JES	NQ3	5.88	5.50	10.50	32	W	SCD33
1.5	C1F1C5JES	NQ3	5.88	5.50	10.50	35	W	SCD33
2	C1F002JES	NQ4	7.00	6.50	11.75	51	W	SCD33
3	C1F003JES	NQ5	10.00	7.75	17.25	98	W	SCD33
5	C1F005JES	NQ5	10.00	7.75	17.25	120	W	SCD44
7.5	C1F007JES	NQ6A	12.25	9.25	17.63	162	W	SCD44
10	C1F010JES	NQ6	12.25	9.25	20.88	194	W	SCD44

600 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			
0.05	C1FC05PE	NQ0	3.75	5.25	7.25	7	W	SCD4
0.10	C1FC10PE	NQ0	3.75	5.25	7.25	7	W	SCD4
0.15	C1FC15PE	NQ0	3.75	5.25	7.25	8	W	SCD4
0.25	C1FC25PE	NQ0	3.75	5.25	7.25	9	W	SCD4
0.35	C1FC35PE	NQ1	4.50	5.75	7.25	15	W	SCD4
0.50	C1FC50PE	NQ1	4.50	5.75	7.25	16	W	SCD4
0.75	C1FC75PES	NQ2	5.00	4.75	9.25	23	W	SCD4
1	C1F1C0PES	NQ3	5.88	5.50	10.50	24	W	SCD4
1.5	C1F1C5PES	NQ3	5.88	5.50	10.50	33	W	SCD4
2	C1F002PES	NQ4	7.00	6.50	11.75	42	W	SCD4
3	C1F003PES	NQ4	7.00	6.50	11.75	55	W	SCD4
5	C1F005PES	NQ5	10.00	7.75	17.25	120	W	SCD4
7.5	C1F007PES	NQ6A	12.25	9.25	17.63	148	W	SCD5
10	C1F010PES	NQ6	12.25	9.25	20.88	179	W	SCD5
15	C1F015PES	NQ7	14.50	10.75	21.38	265	W	SCD5
25	C1F025PES	NQ8	14.50	10.75	27.38	385	W	SCD5
37.5	C1F037PES	NQS10	21.88	18.50	31.00	598	F or W*	SCD5

\*OPTIONAL WALL MOUNTING KIT REQUIRED. REFER TO PAGE 240 FOR DETAILS.

## Export Model



190/200/208/220/240<sup>1</sup> X 380/400/416/440/480<sup>1</sup> 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			
0.05	C1FC05XE	NQ0	3.75	5.25	7.25	7	W	SCD28
0.10	C1FC10XE	NQ0	3.75	5.25	7.25	7	W	SCD28
0.15	C1FC15XE	NQ0	3.75	5.25	7.25	9	W	SCD28
0.25	C1FC25XE	NQ0	3.75	5.25	7.25	10	W	SCD28
0.35	C1FC35XE	NQ1	4.50	5.75	7.25	15	W	SCD28
0.50	C1FC50XE	NQ1	4.50	5.75	7.25	16	W	SCD28
0.75	C1FC75XES	NQ2	5.00	4.75	9.25	24	W	SCD28
1	C1F1C0XES	NQ3	5.88	5.50	10.50	32	W	SCD28
1.5	C1F1C5XES	NQ4	7.00	6.50	11.75	37	W	SCD28
2	C1F002XES	NQ4	7.00	6.50	11.75	52	W	SCD28
3	C1F003XES	NQ5	10.00	7.75	17.25	97	W	SCD2
5	C1F005XES	NQ5	10.00	7.75	17.25	120	W	SCD2
7.5	C1F007XES	NQ6A	12.25	9.25	17.63	148	W	SCD2
10	C1F010XES	NQ6	12.25	9.25	20.88	179	W	SCD2

Note <sup>1</sup>: The primary voltage ratio of 240 or 480 is available at 60Hz only with a secondary voltage of approximately 130/262V.





## HPS FORTRESS™

### COMMERCIAL ENCAPSULATED DISTRIBUTION TRANSFORMERS THREE PHASE STANDARD SPECIFICATIONS

2 TO 3 KVA



6 TO 75 KVA



	2 kVA to 3 kVA	6 kVA to 75 kVA
<b>UL Listed</b>	File: E50394	File: E50394
<b>CSA Certified</b>	File: LR3902	File: LR3902
<b>Frequency</b>	60 Hz (50/60 Hz)	60 Hz (50/60 Hz)
<b>Insulation System</b>	130°C (80°C rise) standard on all units.	180°C (115°C rise) standard on all units.
<b>Electrostatic Shield</b>	Standard on all units.	Standard on all units.
<b>Encapsulation</b>	All units are encapsulated with electrical grade silica sand and resin compounds.	All units are encapsulated with electrical grade silica sand and resin compounds.
<b>Enclosure Type</b>	Type 3R	Type 3R
<b>Enclosure Finish</b>	ANSI 61 Grey, UL50	ANSI 61 Grey, UL50
<b>Termination</b>	Top accessible separate high and low voltage lead wires or copper tabs.	Top accessible separate high and low voltage lead wires or copper tabs.
<b>Conduit Knock-Outs</b>	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).
<b>Impedance</b>	Typically 4 to 8%	Typically 1 to 5%.
<b>Mounting</b>	Standard Wall Mounting Lifting provisions standard on all units.	Standard Wall Mounting up to (but not including) 15 kVA (optional wall mounting kit available for 15 kVA, 30 kVA and 45 kVA). Floor mount only over 45 kVA. Lifting provisions standard 6 kVA to 75 kVA.
<b>Sound Level</b>	Meets NEMA ST-20 standards.	Meets NEMA ST-20 standards.

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



# SECTION 8

# COMMERCIAL ENCAPSULATED

## THREE PHASE, NEMA 3R STYLE ENCLOSURE



208 Primary Volts

208Y/120 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			
2	C3F002BBS	NQT3	12.38	5.44	11.13	50	W	SCD8
3	C3F003BBS	NQT3	12.38	5.44	11.13	70	W	SCD8
6	C3F006BBS	NQT5	16.63	10.25	16.63	140	W	SCD8
9	C3F009BBS	NQT6	19.25	10.44	16.63	210	W	SCD8
15	C3F015BBS	NQT7	20.25	13.00	23.38	350	F or W*	SCD8
30	C3F030BBS	NQT8	22.25	13.00	28.38	525	F or W*	SCD9
45	C3F045BBS	NQT9	31.50	16.00	29.88	700	F or W*	SCD9
75	C3F075BBS	NQT9A	34.63	18.50	36.75	1420	F	SCD9

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.

208 Primary Volts

480Y/277 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			
2	C3F002BKS	NQT3	12.38	5.44	11.13	50	W	SCD23
3	C3F003BKS	NQT3	12.38	5.44	11.13	70	W	SCD23
6	C3F006BKS	NQT5	16.63	10.25	16.63	140	W	SCD23
9	C3F009BKS	NQT6	19.25	10.44	16.63	210	W	SCD23
15	C3F015BKS	NQT7	20.25	13.00	23.38	350	F or W*	SCD23
30	C3F030BKS	NQT8	22.25	13.00	28.38	525	F or W*	SCD26
45	C3F045BKS	NQT9	31.50	16.00	29.88	700	F or W*	SCD26
75	C3F075BKS	NQT9A	34.63	18.50	36.75	1420	F	SCD26

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.

240 Primary Volts

208Y/120 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			
2	C3F002DBS	NQT3	12.38	5.44	11.13	50	W	SCD8
3	C3F003DBS	NQT3	12.38	5.44	11.13	70	W	SCD8
6	C3F006DBS	NQT5	16.63	10.25	16.63	140	W	SCD8
9	C3F009DBS	NQT6	19.25	10.44	16.63	210	W	SCD8
15	C3F015DBS	NQT7	20.25	13.00	23.38	350	F or W*	SCD8
30	C3F030DBS	NQT8	22.25	13.00	28.38	525	F or W*	SCD9
45	C3F045DBS	NQT9	31.50	16.00	29.88	700	F or W*	SCD9
75	C3F075DBS	NQT9A	34.63	18.50	36.75	1420	F	SCD9

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.

240 Primary Volts

480Y/277 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			
2	C3F002DKS	NQT3	12.38	5.44	11.13	50	W	SCD23
3	C3F003DKS	NQT3	12.38	5.44	11.13	70	W	SCD23
6	C3F006DKS	NQT5	16.63	10.25	16.63	140	W	SCD23
9	C3F009DKS	NQT6	19.25	10.44	16.63	210	W	SCD23
15	C3F015DKS	NQT7	20.25	13.00	23.38	350	F or W*	SCD23
30	C3F030DKS	NQT8	22.25	13.00	28.38	525	F or W*	SCD26
45	C3F045DKS	NQT9	31.50	16.00	29.88	700	F or W*	SCD26
75	C3F075DKS	NQT9A	34.63	18.50	36.75	1420	F	SCD26

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.



## THREE PHASE, NEMA 3R STYLE ENCLOSURE



480 Primary Volts

208Y/120 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			
2	C3F002KBS	NQT3	12.38	5.44	11.13	50	W	SCD8
3	C3F003KBS	NQT3	12.38	5.44	11.13	70	W	SCD8
6	C3F006KBS	NQT5	16.63	10.25	16.63	140	W	SCD8
9	C3F009KBS	NQT6	19.25	10.44	16.63	210	W	SCD8
15	C3F015KBS	NQT7	20.25	13.00	23.38	350	F or W*	SCD8
30	C3F030KBS	NQT8	22.25	13.00	28.38	525	F or W*	SCD9
45	C3F045KBS	NQT9	31.50	16.00	29.88	700	F or W*	SCD9
75	C3F075KBS	NQT9A	34.63	18.50	36.75	1420	F	SCD9

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.

480 Primary Volts

240D 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			
2	C3F002KDS	NQT3	12.38	5.44	11.13	50	W	SCD12
3	C3F003KDS	NQT3	12.38	5.44	11.13	70	W	SCD12
6	C3F006KDS	NQT5	16.63	10.25	16.63	140	W	SCD12
9	C3F009KDS	NQT6	19.25	10.44	16.63	210	W	SCD12
15	C3F015KDS	NQT7	20.25	13.00	23.38	350	F or W*	SCD12
30	C3F030KDS	NQT8	22.25	13.00	28.38	525	F or W*	SCD38
45	C3F045KDS	NQT9	31.50	16.00	29.88	700	F or W*	SCD38
75	C3F075KDS	NQT9A	34.63	18.50	36.75	1420	F	SCD38

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.

600 Primary Volts

208Y/120 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			
2	C3F002PBS	NQT3	12.38	5.44	11.13	50	W	SCD8
3	C3F003PBS	NQT3	12.38	5.44	11.13	70	W	SCD8
6	C3F006PBS	NQT5	16.63	10.25	16.63	140	W	SCD8
9	C3F009PBS	NQT6	19.25	10.44	16.63	210	W	SCD8
15	C3F015PBS	NQT7	20.25	13.00	23.38	350	F or W*	SCD8
30	C3F030PBS	NQT8	22.25	13.00	28.38	525	F or W*	SCD9
45	C3F045PBS	NQT9	31.50	16.00	29.88	700	F or W*	SCD9
75	C3F075PBS	NQT9A	34.63	18.50	36.75	1420	F	SCD9

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.

600 Primary Volts

240D 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			
2	C3F002PDS	NQT3	12.38	5.44	11.13	50	W	SCD12
3	C3F003PDS	NQT3	12.38	5.44	11.13	70	W	SCD12
6	C3F006PDS	NQT5	16.63	10.25	16.63	140	W	SCD12
9	C3F009PDS	NQT6	19.25	10.44	16.63	210	W	SCD12
15	C3F015PDS	NQT7	20.25	13.00	23.38	350	F or W*	SCD12
30	C3F030PDS	NQT8	22.25	13.00	28.38	525	F or W*	SCD45
45	C3F045PDS	NQT9	31.50	16.00	29.88	700	F or W*	SCD45
75	C3F075PDS	NQT9A	34.63	18.50	36.75	1420	F	SCD45

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.



SECTION 8

## 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**

HHPS 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
<b>Voltage Groups</b>	5 standard voltage groups	5 standard voltage groups
<b>Ratings</b>	0.5 kVA to 37.5 kVA	2 kVA to 150 kVA
<b>Frequency</b>	60 Hz (50/60 Hz on units with 380V primary)	60 Hz (50/60 Hz on units with 380V primary)
<b>Electrostatic Shield</b>	Optional on 0.50 kVA Standard on 0.75 kVA to 37.5 kVA	Standard on all units
<b>Encapsulated</b>	All units are encapsulated with electrical grade silica sand and resin compounds	
<b>Enclosure</b>	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
<b>Terminations</b>	Front accessible separated high and low voltage lead wires or copper tabs	Top accessible separate high and low voltage lead wires or copper tabs
<b>Insulation System</b>	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
<b>Mounting</b>	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.
<b>Conduit Knockouts</b>	For rear and side entry into an easily accessible and spacious wiring compartment (no knock-outs on Stainless Steel enclosures).	
<b>Approvals</b>	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	
<b>Warranty</b>	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

#### 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
<b>ANSI/ISA 12.12.10</b>	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
<b>ABS Type Approval (RQS)</b>	Certificate No.: 14-HS1174640-PDA	Certificate No.: 14-HS1174640-PDA
<b>North American Temperature Classification</b>	T3C Approval	T3C Approval for 80°C rise units T3A Approval for 115°C rise units
<b>Frequency</b>	60 Hz (50/60 Hz on units with 380V primary)	60 Hz (50/60 Hz on units with 380V primary)
<b>Insulation System</b>	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.
<b>Electrostatic Shield</b>	Optional on 0.50 kVA. Standard on 0.75 kVA and 1 kVA.	Standard on all units.
<b>Encapsulation</b>	All units are encapsulated with electrical grade silica sand and resin compounds.	All units are encapsulated with electrical grade silica sand and resin compounds.
<b>Enclosure Type</b>	Heavy duty type 3R Optional type 4, 4X (stainless steel) and 12	Heavy duty type 3R Optional type 4, 4X (stainless steel) and 12
<b>Enclosure Finish</b>	ANSI 61 Grey, UL50	ANSI 61 Grey, UL50
<b>Termination</b>	Front accessible separate high and low voltage lead wires or copper tabs.	Front accessible separate high and low voltage lead wires or copper tabs.
<b>Conduit Knock-Outs</b>	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).
<b>Impedance</b>	Typically 5 to 10% on 0.50 kVA. Typically 1 to 5% on 0.75 kVA and 1 kVA	Typically 1 to 5%.
<b>Mounting</b>	Standard Wall Mounting Lifting provisions standard on all units.	Standard Wall Mounting Lifting provisions standard on units.
<b>Seismic</b>	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 $I_p = 1.5$
<b>Sound Level</b>	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	5.00	4.75	9.25	19	W	SCD 18
0.75	QC75YEKB	NQ2	5.00	4.75	9.25	21	W	SCD 18
1	Q1C0YEKB	NQ3	5.88	5.50	10.50	28	W	SCD 18
1.5	Q1C5YEKF	NQ3	5.88	5.50	10.50	36	W	SCD 18
2	Q002YEKF	NQ4	7.00	6.50	11.75	44	W	SCD 18
3	Q003YEKF	NQ4	7.00	6.50	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	5.00	4.75	9.25	18	W	SCD 33
0.75	QC75FEKB	NQ2	5.00	4.75	9.25	20	W	SCD 33
1	Q1C0FEKB	NQ3	5.88	5.50	10.50	26	W	SCD 33
1.5	Q1C5FEKF	NQ3	5.88	5.50	10.50	36	W	SCD 33
2	Q002FEKF	NQ4	7.00	6.50	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	145	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	5.00	4.75	9.25	23	W	SCD 1
0.75	QC75LEKB	NQ2	5.00	4.75	9.25	24	W	SCD 1
1	Q1C0LEKB	NQ3	5.88	5.50	10.50	28	W	SCD 1
1.5	Q1C5LEKF	NQ3	5.88	5.50	10.50	35	W	SCD 1
2	Q002LEKF	NQ4	7.00	6.50	11.75	47	W	SCD 1
3	Q003LEKF	NQ4	7.00	6.50	11.75	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"





600 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	QC50PECB	NQ2	5.00	4.75	9.25	15	W	SCD 4
0.75	QC75PEKB	NQ2	5.00	4.75	9.25	18	W	SCD 4
1	Q1C0PEKB	NQ3	5.88	5.50	10.50	27	W	SCD 4
1.5	Q1C5PEKF	NQ3	5.88	5.50	10.50	31	W	SCD 4
2	Q002PEKF	NQ4	7.00	6.50	11.75	40	W	SCD 4
3	Q003PEKF	NQ4	7.00	6.50	11.75	52	W	SCD 4
5	Q005PEKF	NQ5	10.00	7.75	17.25	114	W	SCD 4
7.5	Q007PEKF	NQ5	10.00	7.75	17.25	129	W	SCD 5
10	Q010PEKF	NQ6	12.25	9.25	20.88	197	W	SCD 5
15	Q015PEKF	NQ6	12.25	9.25	20.88	234	W	SCD 5
25	Q025PEKF	NQ7	14.50	10.75	21.38	285	W	SCD 6
37.5	Q037PEKF	NQ8	14.50	10.75	27.38	454	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

Export Model **CE**

190/200/208/220/240<sup>1</sup> X 380/400/415/440/480<sup>1</sup> 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	QC50XEKB	NQ2	5.00	4.75	9.25	15	W	SCD 28
0.75	QC75XEKB	NQ2	5.00	4.75	9.25	20	W	SCD 28
1	Q1C0XEKB	NQ3	5.88	5.50	10.50	32	W	SCD 28
1.5	Q1C5XEKF	NQ3	5.88	5.50	10.50	35	W	SCD 28
2	Q002XEKF	NQ4	7.00	6.50	11.75	54	W	SCD 28
3	Q003XEKF	NQ5	10.00	7.75	17.25	105	W	SCD 2
5	Q005XEKF	NQ5	10.00	7.75	17.25	138	W	SCD 2
7.5	Q007XEKF	NQ6	12.25	9.25	20.88	189	W	SCD 2
10	Q010XEKF	NQ6	12.25	9.25	20.88	222	W	SCD 2
15	Q015XEKF	NQ7	14.5	10.75	21.38	300	W	SCD 2
25	Q025XEKF							
37.5	Q037XEKF							

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"

The above export model units carry the CE Mark.

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

Note <sup>1</sup>: The primary voltage ratio of 240 or 480 is available at 60Hz only with a secondary voltage of approximately 130/262V.





## HPS TITAN TRANSFORMERS FOR HARSH ENVIRONMENTS AND HAZARDOUS LOCATIONS

### THREE PHASE STANDARD SPECIFICATIONS



**2 TO 15 KVA**



**30 TO 150 KVA**



	<b>2 kVA to 5 kVA</b>	<b>6 kVA to 150 kVA</b>
<b>ANSI/ISA 12.12.10</b>	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
<b>ABS Type Approval (RQS)</b>	Certificate No.: 14-HS1174640-PDA	Certificate No.: 14-HS1174640-PDA
<b>North American Temperature Classification</b>	T3C Approval	T3C Approval for 80°C rise units T3A Approval for 115°C rise units
<b>Frequency</b>	60 Hz (50/60 Hz on units with 380V primary)	60 Hz (50/60 Hz on units with 380V primary)
<b>Insulation System</b>	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.
<b>Electrostatic Shield</b>	Standard on all units.	Standard on all units.
<b>Encapsulation</b>	All units are encapsulated with electrical grade silica sand and resin compounds.	All units are encapsulated with electrical grade silica sand and resin compounds.
<b>Enclosure Type</b>	Heavy duty type 3R Optional type 4, 4X (stainless steel) and 12	Heavy duty type 3R Optional type 4, 4X (stainless steel) and 12
<b>Enclosure Finish</b>	ANSI 61 Grey, UL50	ANSI 61 Grey, UL50
<b>Termination</b>	Top accessible separate high and low voltage lead wires or copper tabs.	Top accessible separate high and low voltage lead wires or copper tabs.
<b>Conduit Knock-Outs</b>	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).
<b>Impedance</b>	Typically 1 to 5%.	Typically 1 to 5%.
<b>Mounting</b>	Standard Wall Mounting.	Standard Wall Mounting up to 15 kVA (Optional wall mounting kit available for 30 kVA and 45 kVA). Floor Mount only over 45 kVA. Lifting provisions standard 6 kVA to 150 kVA.
<b>Seismic</b>	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 $I_p = 1.5$
<b>Sound Level</b>	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 three 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".





## THREE PHASE, NEMA 3R STYLE ENCLOSURE



480 Delta Primary Volts

208Y/120 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			
2	P002KBKB	NQT3	12.38	5.44	12.39	49	W	SCD 8
3	P003KBKB	NQT3	12.38	5.44	12.39	86	W	SCD 8
6	P006KBKF	NQT4	15.19	6.94	16.39	160	W	SCD 8
9	P009KBKF	NQT5	16.63	10.25	17.89	262	W	SCD 8
15	P015KBKF	NQT6	19.25	10.44	17.89	304	W	SCD 7
30	P030KBKF	NQT7	20.25	13.00	23.38	478	F or W*	SCD 19
45	P045KBKF	NQT8	22.25	13.00	28.38	642	F or W*	SCD 19
75	P075KBKF	NQT9	31.25	16.00	29.88	1450	F	SCD 19
112.5	P112KBKF	NQT10	38.44	26.00	39.13	2100	F	SCD 19
150	P150KBKF	NQT11	37.38	30.00	45.63	2650	F	SCD 19

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

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.

480 Delta Primary Volts

240 Delta 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			
2	P002KDKB	NQT3	12.38	5.44	12.39	52	W	SCD 12
3	P003KDKB	NQT3	12.38	5.44	12.39	68	W	SCD 12
6	P006KDKF	NQT4	15.19	6.94	16.39	182	W	SCD 12
9	P009KDKF	NQT5	16.63	10.25	17.89	250	W	SCD 37
15	P015KDKF	NQT6	19.25	10.44	17.89	312	W	SCD 37
30	P030KDKF	NQT7	20.25	13.00	23.38	540	F or W*	SCD 38
45	P045KDKF	NQT8	22.25	13.00	28.38	650	F or W*	SCD 38
75	P075KDKF	NQT9	31.25	16.00	29.88	1230	F	SCD 38
112.5	P112KDKF	NQT10	38.44	26.00	39.13	2100	F	SCD 38
150	P150KDKF	NQT11	37.38	30.00	45.63	2650	F	SCD 38

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

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.

600 Delta Primary Volts

208Y/120 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			
2	P002PBKB	NQT3	12.38	5.44	12.39	85	W	SCD 8
3	P003PBKB	NQT3	12.38	5.44	12.39	94	W	SCD 8
6	P006PBKF	NQT4	15.19	6.94	16.39	146	W	SCD 8
9	P009PBKF	NQT5	16.63	10.25	17.89	211	W	SCD 9
15	P015PBKF	NQT6	19.25	10.44	17.89	340	W	SCD 9
30	P030PBKF	NQT7	20.25	13.00	23.38	605	F or W*	SCD 9
45	P045PBKF	NQT8	22.25	13.00	28.38	770	F or W*	SCD 9
75	P075PBKF	NQT9	31.25	16.00	29.88	1350	F	SCD 9
112.5	P112PBKF	NQT10	38.44	26.00	39.13	3150	F	SCD 9
150	P150PBKF	NQT11	37.38	30.00	45.63	3200	F	SCD 9

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

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.



## THREE PHASE, NEMA 3R STYLE ENCLOSURE



600 Wye Primary Volts

240 Delta 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			
2	P002PDKB	NQT3	12.38	5.44	12.39	51	W	SCD 27
3	P003PDKB	NQT3	12.38	5.44	12.39	68	W	SCD 27
6	P006PDKF	NQT4	15.19	6.94	16.39	146	W	SCD 27
9	P009PDKF	NQT5	16.63	10.25	17.89	211	W	SCD 29
15	P015PDKF	NQT6	19.25	10.44	17.89	270	W	SCD 29
30	P030PDKF	NQT7	20.25	13.00	23.38	515	F or W*	SCD 16
45	P045PDKF	NQT8	22.25	13.00	28.38	740	F or W*	SCD 16
75	P075PDKF	NQT9	31.25	16.00	29.88	CF	F	SCD 16
112.5	P112PDKF	NQT10	38.44	26.00	39.13	CF	F	SCD 16
150	P150PDKF	NQT11	37.38	30.00	45.63	CF	F	SCD 16

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

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.

600, 480 Delta Primary Volts

480Y/277 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			
2	P002QKKB	NQT3	12.38	5.44	12.39	65	W	SCD 20
3	P003QKKB	NQT3	12.38	5.44	12.39	69	W	SCD 20
6	P006QKKF	NQT4	15.19	6.94	16.39	190	W	SCD 20
9	P009QKKF	NQT5	16.63	10.25	17.89	270	W	SCD 47
15	P015QKKF	NQT7	20.25	13.00	23.38	380	F or W*	SCD 47
30	P030QKKF	NQT7	20.25	13.00	23.38	472	F or W*	SCD 11
45	P045QKKF	NQT8	22.25	13.00	28.38	680	F or W*	SCD 11
75	P075QKKF	NQT9	31.25	16.00	29.88	1650	F	SCD 11
112.5	P112QKKF	NQT10	38.44	26.00	39.13	CF	F	<b>Consult Factory</b>
150	P150QKKF	NQT11	37.38	30.00	45.63	CF	F	<b>Consult Factory</b>

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

\*OPTIONAL WALL MOUNTING KIT REQUIRED.  
REFER TO PAGE 240 FOR DETAILS.



