

## Hazardous Location

Hevi-Duty encapsulated transformers are rated for Hazardous Locations (Class 1, Division 2, Group A-D) as well as harsh industrial environments. Encapsulation and rugged NEMA 3R enclosures protect the transformer from dust, moisture, and provide extra shock and vibration resistance. Hevi-Duty UL listed transformers fully comply with the latest addition of the National Electrical Code for Class 1, Division 2, Group A-D locations when installed in compliance with NEC 501-2(b).



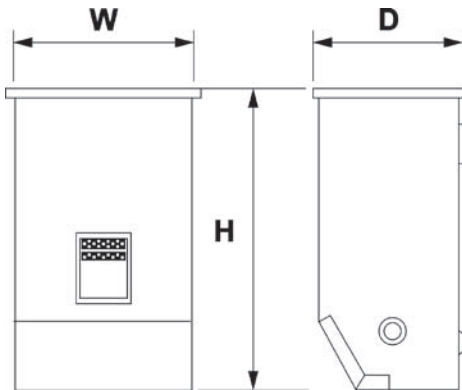
## Features

- Broad Line:  
Single Phase: 0.5K – 25K  
Three Phase: 3K – 45K
- Encapsulated construction
- UL Class 180°C insulation system, 115°C temperature rise under full load
- Available in cold rolled steel painted or stainless steel enclosures
- NEMA 3R outdoor enclosures standard
- Shielded for quality power on sizes 1 KVA and above
- Available in NEMA 4/12 or 4X enclosures

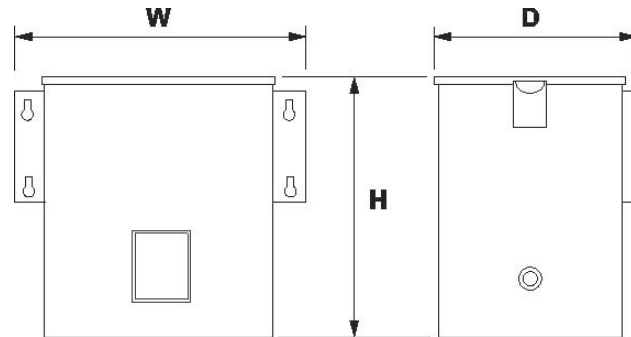
## Related Products

- Some Sola DC power supplies are available with Class 1, Division 2 ratings or encapsulation.
- Surge Suppression products (Chapter 1)

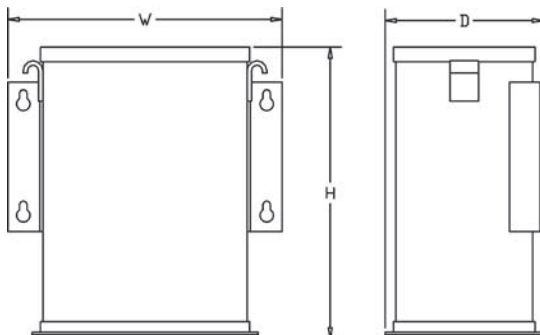
## Design Styles



Style 3 - Encapsulated



Style 4 - Encapsulated



Style 5 - Encapsulated

For customized enclosures, contact Technical Services.

Visit our website at [www.solaheviduty.com](http://www.solaheviduty.com) or contact **Technical Services** at (800) 377-4384 with any questions.

## Selection Tables: Single Phase, Encapsulated

### Group 1: 240 x 480 Primary, 120/240 Secondary, 60 Hz



KVA	Catalog Number Group I Rolled Steel	Catalog Number Group II Stainless Steel	Height (inch)	Width (inch)	Depth (inch)	Approx. Ship Weight (lbs)	Design Style	Elec Conn	Primary Amps	Secondary Amps
0.5	HS1F500B	HSS1F500B	10	6	5	22	3	1	2.08/1.04	4.16/2.08
0.75	HS1F750B	HSS1F750B	10	6	5	27	3	1	3.13/1.56	6.25/3.13
1.0	HS1F1BS	HSS1F1BS	10	6	5	28	3	2	4.17/2.08	8.33/4.17
1.5	HS1F1.5AS	HSS1F1.5AS	12	10	7	38	4	2	6.25/3.13	12.5/6.25
2.0	HS1F2AS	HSS1F2AS	12	10	7	45	4	2	8.33/4.17	16.7/8.33
3.0	HS5F3AS	HSS5F3AS	12	10	7	55	4	3	12.5/6.25	25.0/12.5
5.0	HS5F5AS	HSS5F5AS	17	14	9	131	4	3	20.8/10.4	41.6/20.8
7.5	HS5F7.5AS	HSS5F7.5AS	17	14	9	156	4	4	31.3/15.6	62.5/31.3
10.0	HS5F10AS	HSS5F10AS	17	14	9	156	4	4	41.7/20.8	83.3/41.7
15.0*	HS5F15AS	HSS5F15AS	30	29	12	549	4	4	62.5/31.2	125/62.5
25.0*	HS5F25AS	HSS5F25AS	30	29	12	637	4	4	104.0/52.0	208.0/104.0

\* cUL Underwriters tested to CSA standards.

## Selection Tables: Three Phase, Encapsulated

### Group A: 480 Δ Primary, 208 Y/120 Secondary, 60 Hz

KVA	Catalog Number Group I Rolled Steel	Catalog Number Group II Stainless Steel	Height (inch)	Width (inch)	Depth (inch)	Approx. Ship Weight (lbs)	Design Style	Elec Conn	Primary Amps	Secondary Amps
3.0	HT1F3AS	HTS1F3AS	13	16	9	105	4	5	3.6	8.3
6.0	HT1F6AS	HTS1F6AS	13	16	9	110	4	5	7.2	16.6
9.0	HT1F9AS	HTS1F9AS	17	20	11	250	4	5	10.8	25
15.0	HT1F15AS	HTS1F15AS	17	20	11	261	4	5	18.1	41.7
30.0*	HT1F30AS	HTS1F30AS	30	29	12	696	4	5	36.1	83.4
45.0*	HT1F45AS	HTS1F45AS	30	29	12	844	4	5	54.2	125.0

\* cUL Underwriters tested to CSA standards.

### Group B: 480 Δ Primary, 240 Volt Δ, 120 Secondary with reduced capacity center tap, 60 Hz\*\*

KVA	Catalog Number Group I Rolled Steel	Catalog Number Group II Stainless Steel	Height (inch)	Width (inch)	Depth (inch)	Approx. Ship Weight (lbs)	Design Style	Elec Conn	Primary Amps	Secondary Amps
3.0	HT5F3AS	HTS5F3AS	13	16	9	105	4	6	3.6	7.2
6.0	HT5F6AS	HTS5F6AS	13	16	9	110	4	6	7.2	14.4
9.0	HT5F9AS	HTS5F9AS	17	20	11	250	4	6	10.8	21.7
15.0	HT5F15AS	HTS5F15AS	17	20	11	305	4	6	18.1	36.1
30.0*	HT5F30AS	HTS5F30AS	29	25	12	698	4	6	36.1	72.2
45.0*	HT5F45AS	HTS5F45AS	29	25	12	876	4	6	54.2	108.3

\* cUL Underwriters tested to CSA standards.

\*\* See the Technical Notes section with respect to capacity of center tap.

Note: Weights and dimensions may change and should not be used for construction purposes.

# Hazardous Location Transformers



## Electrical Connections

**1**  
240 X 480 Volt Primary,  
120/240 Volt Secondary  
Taps: None

Primary Voltage	Interconnect	Connect Lines to
480	H2 to H3	H1 & H4
240	H1 to H3 H2 to H4	H1 & H4
Secondary Voltage	Interconnect	Connect Lines to
240	X2 to X3	X1 & X4
120-0-120	X2 to X3 X2 to $\perp$	X1-X2-X4
120	X1 to X3 X2 to X4	X1 & X4

**2**  
240 X 480 Volt Primary  
120/240 Volt Secondary  
Taps: None

Primary Voltage	Interconnect	Connect Lines to
480	H2 to H3	H1 & H4
240	H1 to H3 H2 to H4	H1 & H4
Secondary Voltage	Interconnect	Connect Lines to
240	X2 to X3	X1 & X4
120-0-120	X2 to X3 X2 to $\perp$	X1-X2-X4
120	X1 to X3 X2 to X4	X1 & X4

**3**  
240 X 480 Volt Primary  
120/240 Volt Secondary  
Taps: 2, 2½% FCAN & FCBN

Primary Voltage	Interconnect	Connect Lines to
504	H4 to H5	H1 & H8
492	H3 to H5	H1 & H8
480	H3 to H6	H1 & H8
468	H2 to H6	H1 & H8
456	H2 to H7	H1 & H8
252	H1 to H5 H4 to H8	H1 & H8
240	H1 to H6 H3 to H8	H1 & H8
228	H1 to H7 H2 to H8	H1 & H8
Secondary Voltage	Interconnect	Connect Lines to
240	X2 to X3	X1 & X4
120-0-120	X2 to X3 X2 to $\perp$	X1-X2-X4
120	X1 to X3 X2 to X4	X1 & X4

**4**  
240 X 480 Volt Primary  
120/240 Volt Secondary  
Taps: 2, 2½% FCAN; 4, 2½% FCBN

Primary Voltage	Interconnect	Connect Lines to
504	H5 to H6	H1 & H10
492	H4 to H6	H1 & H10
480	H4 to H7	H1 & H10
468	H3 to H7	H1 & H10
456	H3 to H8	H1 & H10
444	H2 to H8	H1 & H10
432	H2 to H9	H1 & H10
252	H1 to H6 H5 to H10	H1 & H10
240	H1 to H7 H4 to H10	H1 & H10
228	H1 to H8 H3 to H10	H1 & H10
216	H1 to H9 H2 to H10	H1 & H10
Secondary Voltage	Interconnect	Connect Lines to
240	X2 to X3	X1 & X4
120-0-120	X2 to X3 X2 to $\perp$	X1-X2-X4
120	X1 to X3 X2 to X4	X1 & X4

**5**  
480 Δ Volt Primary  
208 Y/120 Volt Secondary  
Taps: 2,5% FCBN

Primary Voltage	Interconnect	Connect Lines to
480	1-H1 & 2-H2 & 3-H3	H1, H2, H3
456	4-H1 & 5-H2 & 6-H3	H1, H2, H3
432	7-H1 & 8-H2 & 9-H3	H1, H2, H3
Secondary Voltage		Connect Lines to
208		X1, X2, & X3
120		X0, X1, X2, X3

**6**  
480 Δ Volt Primary, 240 Δ Volt  
Secondary w/120 Volt Center Tap  
Taps: 2,5% FCBN

Primary Voltage	Connect Taps	Line Leads
480	1-H1 & 2-H2 & 3-H3	H1, H2, H3
456	4-H1 & 5-H2 & 6-H3	H1, H2, H3
432	7-H1 & 8-H2 & 9-H3	H1, H2, H3
Secondary Voltage	Interconnect	Line Leads
240		X1, X2, X3
120-0-120	X6 to $\perp$	X1-X6-X3