

Automation Transformers - Non-Ventilated 50 VA to 45 kVA

SolaHD encapsulated transformers are rated for Hazardous Locations as well as harsh industrial environments. Encapsulation and rugged UL Listed/NEMA Type 3R enclosures protect the transformer from dust, moisture, and provide extra shock and vibration resistance. SolaHD transformers fully comply with the latest addition of the National Electrical Code for Class I, Division 2, Group A, B, C and D locations when installed in compliance with NEC 501.100 (B).

Features

Single Phase: .05 – .250 kVA

- UL Listed/NEMA Type 3R non encapsulated enclosure for indoor and outdoor service
- Low temperature rise, UL Class 130°C insulation system, 80°C temperature rise under full load
- Conduit knockouts for side entry into wiring compartment
- Copper lead wire terminations

Single Phase: 0.500 – 25 kVA

Three Phase: 3 – 45 kVA

- UL Listed/NEMA Type 3R encapsulated enclosure for indoor and outdoor service
- Electrostatically shielded for quality power on sizes 1 kVA and larger
- UL Class 200°C insulation system, 115°C temperature rise under full load
- Conduit knockouts for side entry into wiring compartment
- Copper lead wire terminations
- .500 - 45 kVA units are encapsulated with electrical grade silica and epoxy for industrial applications

Related Products

- Some SolaHD DC power supplies are available with Class I, Division 2 ratings or encapsulation.
- Surge Protective Devices

Certifications and Compliances

-  Listed: E25872, E77014
 - UL 1561 or UL 506
 - CSA C22.2 No. 47 or No. 66



Accessories and Optional Design Styles

- Stainless Steel Enclosures
- Copper Wound designs
- UL Listed/NEMA Type 4, 4X or 12 Encapsulated Enclosures
- Low temperature designs available

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

Selection Table: Single Phase

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 in (mm)	Width in (mm)	Depth in (mm)	Approx. Ship Weight lbs (kg)	Design Style *	Elec Conn *	Primary Amps	Secondary Amps
Non-Encapsulated										
.050	HS1B50	N/A	6.00 (152.4)	4.00 (101.6)	3.00 (76.2)	3.00 (1.36)	2	15	.208/.104	0.416/0.208
.075	HS1B75		6.00 (152.4)	4.00 (101.6)	3.00 (76.2)	3.00 (1.36)	2	15	.312/.156	0.625/0.312
.100	HS1B100		6.00 (152.4)	4.00 (101.6)	3.00 (76.2)	4.00 (1.81)	2	15	.417/.208	0.833/0.417
.150	HS1B150		8.00 (203.2)	4.00 (101.6)	4.00 (101.6)	5.00 (2.27)	2	15	.625/.313	1.25/.625
.250	HS1B250		8.00 (203.2)	4.00 (101.6)	4.00 (101.6)	8.00 (3.63)	2	15	1.04/.512	2.08/1.04
Encapsulated										
0.5	HS1F500B	HSS1F500B	10.00 (254.0)	6.00 (152.4)	5.00 (127.0)	22.0 (9.98)	3	15	2.08/1.04	4.16/2.08
0.75	HS1F750B	HSS1F750B	10.00 (254.0)	6.00 (152.4)	5.00 (127.0)	27.0 (12.25)	3	15	3.13/1.56	6.25/3.13
1	HS1F1BS	HSS1F1BS	10.00 (254.0)	6.00 (152.4)	5.00 (127.0)	28.0 (12.70)	3	16	4.17/2.08	8.33/4.17
1.5	HS1F1.5AS	HSS1F1.5AS	12.00 (304.8)	10.00 (254.0)	7.00 (177.8)	38.0 (17.24)	4	16	6.25/3.13	12.5/6.25
2	HS1F2AS	HSS1F2AS	12.00 (304.8)	10.00 (254.0)	7.00 (177.8)	45.0 (20.42)	4	16	8.33/4.17	16.7/8.33
3	HS5F3AS	HSS5F3AS	12.00 (304.8)	10.00 (254.0)	7.00 (177.8)	55.0 (24.95)	4	17	12.5/6.25	25.0/12.5
5	HS5F5AS	HSS5F5AS	17.00 (431.8)	14.00 (355.6)	9.00 (228.6)	131.0 (59.42)	4	17	20.8/10.4	41.6/20.8
7.5	HS5F7.5AS	HSS5F7.5AS	17.00 (431.8)	14.00 (355.6)	9.00 (228.6)	156.0 (70.76)	4	18	31.3/15.6	62.5/31.3
10	HS5F10AS	HSS5F10AS	17.00 (431.8)	14.00 (355.6)	9.00 (228.6)	156.0 (70.76)	4	18	41.7/20.8	83.3/41.7
15	HS5F15AS	HSS5F15AS	30.00 (762.0)	29.00 (736.6)	12.00 (304.8)	549.0 (249.02)	4	18	62.5/31.2	125.0/62.5
25	HS5F25AS	HSS5F25AS	30.00 (762.0)	29.00 (736.6)	12.00 (304.8)	637.0 (288.94)	4	18	104.0/52.0	208.0/104.0

Group 2: 600 Volt Primary, 120/240 Secondary, 60 Hz

kVA	Catalog Number Group 1 Rolled Steel	Catalog Number Group 2 Stainless Steel	Height in (mm)	Width in (mm)	Depth in (mm)	Approx. Ship Weight lbs (kg)	Design Style *	Elec Conn *	Primary Amps	Secondary Amps
Non-Encapsulated										
.100	HS10B100	N/A	6.00 (152.4)	4.00 (101.6)	3.00 (76.2)	4.00 (1.81)	2	21	0.167	.833/.417
.150	HS10B150		8.00 (203.2)	4.00 (101.6)	4.00 (101.6)	5.00 (2.27)	2	21	0.25	1.25/.625
.250	HS10B250		8.00 (203.2)	4.00 (101.6)	4.00 (101.6)	8.00 (3.63)	2	21	0.417	2.08/1.04
Encapsulated										
.500	HS10F500B	HSS10F500B	10.00 (254.0)	6.00 (152.4)	5.00 (127.0)	22.0 (9.98)	3	21	0.833	4.16/2.08
.750	HS10F750B	HSS10F750B	10.00 (254.0)	6.00 (152.4)	5.00 (127.0)	23.0 (10.43)	3	21	1.25	6.25/3.13
1	HS10F1BS	HSS10F1BS	10.00 (254.0)	6.00 (152.4)	5.00 (127.0)	28.0 (12.70)	3	21	1.67	8.33/4.17
1.5	HS10F1.5AS	HSS10F1.5AS	12.00 (304.8)	10.00 (254.0)	7.00 (177.8)	38.0 (17.24)	4	21	2.5	12.5/6.25
2	HS10F2AS	HSS10F2AS	12.00 (304.8)	10.00 (254.0)	7.00 (177.8)	60.0 (27.22)	4	21	3.33	16.7/8.33
3	HS10F3AS	HSS10F3AS	12.00 (304.8)	10.00 (254.0)	7.00 (177.8)	66.0 (29.94)	4	22	5.0	25.0/12.5
5	HS10F5AS	HSS10F5AS	17.00 (431.8)	14.00 (355.6)	9.00 (228.6)	100.0 (45.36)	4	22	8.3	41.6/20.8
7.5	HS10F7.5AS	HSS10F7.5AS	17.00 (431.8)	14.00 (355.6)	9.00 (228.6)	135.0 (61.23)	4	22	12.5	62.5/31.3
10	HS10F10AS	HSS10F10AS	17.00 (431.8)	14.00 (355.6)	9.00 (228.6)	150.0 (68.04)	4	22	16.7	83.3/41.7

* Note: Design Styles and Electrical Connections can be found at the end of the Non-Ventilated Distribution Transformers section.

Selection Table: Single Phase

Group 3: 120/208/240/277 Volt Primary, 120/240 Secondary, 60 Hz

kVA	Catalog Number Group 1 Rolled Steel	Catalog Number Group 2 Stainless Steel	Height in (mm)	Width in (mm)	Depth in (mm)	Approx. Ship Weight lbs (kg)	Design Style ¹	Elec Conn ¹	Primary Amps @ 277 V	Secondary Amps
Encapsulated										
1	HS12F1BS	HSS12F1BS	10.00 (254.0)	6.00 (152.4)	5.00 (127.0)	29.0 (13.15)	3	19	3.6	8.33/4.17
1.5	HS12F1.5AS	HSS12F1.5AS	12.00 (304.8)	10.00 (254.0)	7.00 (177.8)	40.0 (18.14)	4	20	5.4	12.5/6.25
2	HS12F2AS	HSS12F2AS	12.00 (304.8)	10.00 (254.0)	7.00 (177.8)	60.0 (27.22)	4	20	7.2	16.7/8.33
3	HS12F3AS	HSS12F3AS	12.00 (304.8)	10.00 (254.0)	7.00 (177.8)	66.0 (29.94)	4	20	10.8	25.0/12.5
5	HS12F5AS	HSS12F5AS	17.00 (431.8)	14.00 (355.6)	9.00 (228.6)	104.0 (47.17)	4	20	18.0	41.6/20.8
7.5	HS12F7.5AS	HSS12F7.5AS	17.00 (431.8)	14.00 (355.6)	9.00 (228.6)	135.0 (61.23)	4	20	27.1	62.5/31.3
10	HS12F10AS	HSS12F10AS	17.00 (431.8)	14.00 (355.6)	9.00 (228.6)	156.0 (70.76)	4	20	36.1	83.3/41.7

Group 4: Export 190/200/208/220/380/400/415/440 Volt Primary, 110/220 Secondary, 50/60 Hz Copper wound
 Export 200/208/230/400/415/460 Volt Primary, 115/230 Secondary, 50/60 Hz Copper wound
 Export 208/240/415/480 Volt Primary, 120/240 Secondary, 60 Hz only Copper wound

kVA	Catalog Number Group 1 Rolled Steel	Catalog Number Group 2 Stainless Steel	Height in (mm)	Width in (mm)	Depth in (mm)	Approx. Ship Weight lbs (kg)	Design Style ¹	Elec Conn ¹	Primary Amps ²	Secondary Amps
Encapsulated, Copper Wound										
1	HS14F1BS	HSS14F1BS	10.00 (254.0)	6.00 (152.4)	5.00 (127.0)	34.0 (15.42)	3	23	4.5/2.3	9.1/4.5
1.5	HS14F1.5BS	HSS14F1.5BS	12.00 (304.8)	10.00 (254.0)	7.00 (177.8)	40.0 (18.13)	4	24	6.8/3.4	13.6/6.8
2	HS14F2BS	HSS14F2BS	12.00 (304.8)	10.00 (254.0)	7.00 (177.8)	60.0 (27.21)	4	24	9.1/4.5	18.2/9.1
3	HS14F3BS	HSS14F3BS	12.00 (304.8)	10.00 (254.0)	7.00 (177.8)	73.0 (33.11)	4	24	13.6/6.8	27.3/13.6
5	HS14F5BS	HSS14F5BS	17.00 (431.8)	14.00 (355.6)	9.00 (228.6)	100.0 (45.36)	4	24	22.7/11.4	45.5/22.7
7.5	HS14F7.5BS	HSS14F7.5BS	17.00 (431.8)	14.00 (355.6)	9.00 (228.6)	140.0 (63.50)	4	24	34.1/17.0	68.2/34.1
10	HS14F10BS	HSS14F10BS	17.00 (431.8)	14.00 (355.6)	9.00 (228.6)	175.0 (79.38)	4	24	45.5/22.7	90.9/45.5

Notes:

- Design Styles and Electrical Connections can be found at the end of the Non-Ventilated Distribution Transformers section.
- Amperage calculated at 220/440 Volts on primary. UL Listed, CSA Certified and CE Marked. 240 & 480 V not available at 50 Hz.