### Drive Isolation Transformers: 7.5-440 kVA, Three Phase

# Special Voltages and kVA Sizes for Drive Applications

For SCR (Silicon Control Rectifier) variable speed motor drive applications, a transformer is needed to magnetically isolate the incoming line from the motor drive. The transformer must also provide a voltage change to match the required voltage of the SCR Drive. Standard designs are delta primary and wye secondary to match the common power sources required in most three phase rectifier circuits.

SolaHD Drive Isolation Transformers are specifically designed to handle the mechanical stresses, voltage demands and harmonics associated with SCR applications.

## **Applications**

SCR Variable Speed Drives

### **Features**

- Available from 7.5 thru 440 kVA, 3 Phase, 60 Hz
- Isolation minimizes load disturbances caused by the SCR drive
- UL Listed/NEMA Type 3R enclosures when used with optional weather shield
- Taps on all units for adjustments to incoming source voltage. Full capacity secondary neutral as required by the National Electric Code
- · Shielding attenuates line to ground noise
- 10 year limited warranty

# **Certifications and Compliances**

### **All Models**

- (UL) Listed
  - E25872 (UL 1561) or E77014 (UL 5085)
  - RoHS Compliant

#### **Selection Table 1: Three Phase**

- c(UL)us Listed (7.5kVA Models only)
- Gertified (11 and 14kVA Models only)

#### **Related Products**

- Surge Protective Devices
- K-13 Rated Transformers for Variable Frequency Drives

### Accessories

Weather Shields and Wall Mount Brackets are available



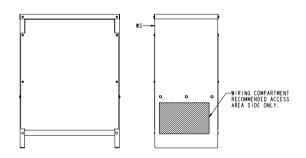




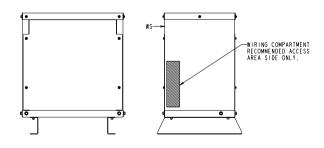
E77014 Select Models

4 E25872

## **Enclosure Design Styles\***



Enclosure Design Style 1 - Ventilated 118 kVA to 500 kVA



Enclosure Style 2 - Ventilated 11 kVA to 112.5 kVA

<sup>\*</sup>Enclosure Design Style 4 is on Page 4

### **Selection Table 1: Three Phase**

kVA	Drive Horse Power	Group I Catalog Number	Group II Catalog Number	Group III Catalog Number	NEMA 3R	Dimensions			Approx.	
		460 D Primary 460Y/266 Secondary 60 Hz	460 D Primary 230Y/133 Secondary 60 Hz	575 D Primary 230Y/133 Secondary 60 Hz	Weather	Height in (mm)	Width in (mm)	Depth in (mm)	Ship Weight lbs (kg)	Design Style
7.5 2	5	DT651F7.5S	DT661F7.5S	DT631F7.5S	N/A(2)	17.00 (431.8)	20.00 (508.0)	10.00 (254.0)	236.0 (107.00)	4
113	7.5	EDT651H11S	EDT661H11S	EDT631H11S	WS-02	23.00 (584.2)	18.00 (457.2)	17 (431)	166.0 (72.00)	2
143	10	EDT651H14S	EDT661H14S	EDT631H14S	WS-02	23.00 (584.2)	18.00 (457.2)	17 (431)	180.0 (82.00)	2
20	15	EDT651H20S	EDT661H20S	EDT631H20S	WS-02	23.00 (584.2)	18.00 (457.2)	17 (431)	210.0 (95.00)	2
27	20	EDT651H27S	EDT661H27S	EDT631H27S	WS-14	28.00 (711.2)	23.00 (584.2)	19 (483)	277.0 (126.00)	2
34	25	EDT651H34S	EDT661H34S	EDT631H34S	WS-14	28.00 (711.2)	23.00 (584.2)	19 (483)	309.0 (140.00)	2
40	30	EDT651H40S	EDT661H40S	EDT631H40S	WS-14	28.00 (711.2)	23.00 (584.2)	19 (483)	329.0 (149.00)	2
51	40	EDT651H51S	EDT661H51S	EDT631H51S	WS-14	28.00 (711.2)	23.00 (584.2)	19 (483)	372.0 (169.00)	2
63	50	EDT651H63S	EDT661H63S	EDT631H63S	WS-30	34.00 (863.6)	28.00 (711.2)	26 (660)	479.0 (217.00)	2
75	60	EDT651H75S	EDT661H75S	EDT631H75S	WS-30	34.00 (863.6)	28.00 (711.2)	26 (660)	510.0 (231.00)	2
93	75	EDT651H93S	EDT661H93S	EDT631H93S	WS-30	34.00 (863.6)	28.00 (711.2)	26 (660)	637.0 (289.00)	2
118	100	DT651H118S	DT661H118S	DT631H118S	WS-10	44.00 (1117.6)	33.00 (838.2)	21.00 (533.4)	910.0 (413.00)	1
145	125	DT651H145S	DT661H145S	DT631H145S	WS-10	44.00 (1117.6)	33.00 (838.2)	21.00 (533.4)	920.0 (417.00)	1
175	150	DT651H175S	DT661H175S	DT631H175S	WS-11	46.00 (1168.4)	36.00 (914.4)	24.00 (609.6)	1150.0 (522.00)	1
220	200	DT651H220S	DT661H220S	DT631H220S	WS-11	46.00 (1168.4)	36.00 (914.4)	24.00 (609.6)	1280.0 (581.00)	1
275	250	DT651H275S	DT661H275S	DT631H275S	WS-11	46.00 (1168.4)	36.00 (914.4)	24.00 (609.6)	1415.0 (642.00)	1
330	300	DT651H330S	DT661H330S	DT631H330S	WS-11	46.00 (1168.4)	36.00 (914.4)	24.00 (609.6)	1525.0 (692.00)	1
440	400	DT651H440S	DT661H440S	DT631H440S	WS-12	65.00 (1651.0)	45.00 (1143.0)	35.00 (889.0)	2450.0 (1111.00)	1

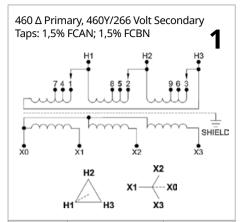
### Notes:

- 1. Weather shields come in a set of two and must be ordered separately.
- ${\it 2. Encapsulated. No weather shield required. cULus~E77014.}\\$
- 3. Units are CSA marked.
- 4. Transformers designated made to order items are subject to terms and conditions per your order acknowledgment.

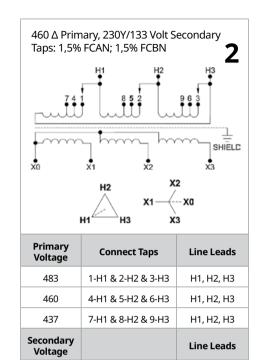
# **Electrical Connection Key**

Electrical Connection
Number
1 4
2
5
6

### **Electrical Connections**

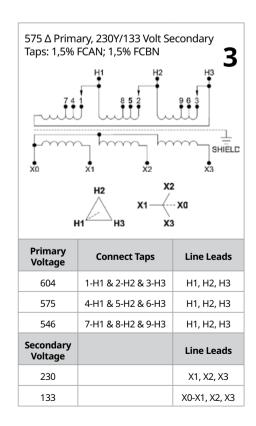


Primary Voltage	Connect	Line Leads
483	1-H1 & 2-H2 & 3-H3	H1, H2, H3
460	4-H1 & 5-H2 & 6-H3	H1, H2, H3
437	7-H1 & 8-H2 & 9-H3	H1, H2, H3
Secondary Voltage		Line Leads
460	_	X1, X2, X3
266		X0-X1, X2, X3



230

133

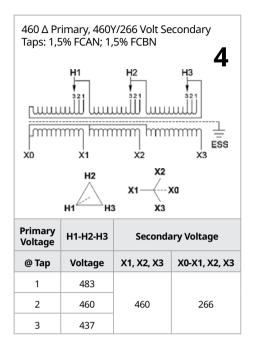


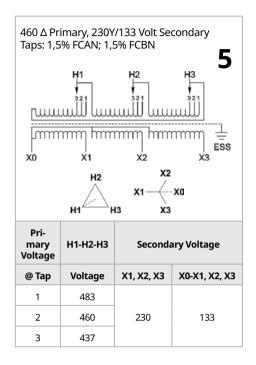
(1) Reference Note(s)

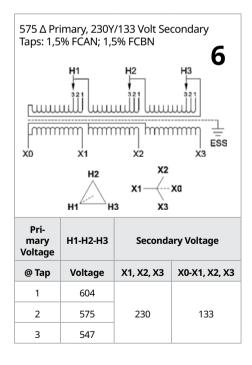
X1, X2, X3

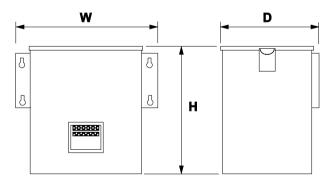
X0-X1, X2, X3

### **Electrical Connections**









Enclosure Design Style 4 - Encapsulated

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

# SolaHD:

<u>EDT631H75S</u> <u>EDT651H27S</u> <u>EDT651H93S</u> <u>EDT631H20S</u> <u>EDT631H51S</u> <u>EDT651H11S</u> <u>EDT651H20S</u> EDT651H51S