

Drive Isolation Transformers

Encapsulated, Wall Mounted

600V Class • Electrostatic Shield • Aluminum Windings‡ • 180°C Insulation Class

KVA	Catalog Number for Primary 230V Delta		Catalog Number for Primary 460V Delta		Catalog Number for Primary 575V Delta		Fig.	Wiring Diagram	Est. Ship Wgt. (lbs.)
	Secondary		Secondary		Secondary				
	230Y/133	460Y/266	230Y/133	460Y/266	230Y/133	460Y/266			
3	413-0018-051	413-0018-056	413-0018-052	413-0018-054	413-0018-053	413-0018-055	4	DIT1	82
6	413-0019-051	413-0019-056	413-0019-052	413-0019-054	413-0019-053	413-0019-055	4		119
7.5	413-0020-051	413-0020-056	413-0020-052	413-0020-054	413-0020-053	413-0020-055	4		157
11	413-0021-051	413-0021-056	413-0021-052	413-0021-054	413-0021-053	413-0021-055	4		228

Ventilated, Floor Mounted

600V Class • Electrostatic Shield • Aluminum Windings‡ • 220°C Insulation Class

KVA	Catalog Number for Primary 230V Delta		Catalog Number for Primary 460V Delta		Catalog Number for Primary 575V Delta		Fig.	Wiring Diagram	Est. Ship Wgt. (lbs.)	
	Secondary		Secondary		Secondary					
	230Y/133	460Y/266	230Y/133	460Y/266	230Y/133	460Y/266				
14	423-0020-051	423-0020-056	423-0020-052	423-0020-054	423-0020-053	423-0020-055	5	DIT2	230	
20	423-0021-051	423-0021-056	423-0021-052	423-0021-054	423-0021-053	423-0021-055	5		245	
27	423-0022-051	423-0022-056	423-0022-052	423-0022-054	423-0022-053	423-0022-055	5		250	
34	423-0023-051	423-0023-056	423-0023-052	423-0023-054	423-0023-053	423-0023-055	5		320	
40	423-0024-051	423-0024-056	423-0024-052	423-0024-054	423-0024-053	423-0024-055	5		335	
51	423-0025-051	423-0025-056	423-0025-052	423-0025-054	423-0025-053	423-0025-055	5		360	
63	423-0026-051	423-0026-056	423-0026-052	423-0026-054	423-0026-053	423-0026-055	5		475	
75	423-0027-051	423-0027-056	423-0027-052	423-0027-054	423-0027-053	423-0027-055	5		500	
93	423-0028-051	423-0028-056	423-0028-052	423-0028-054	423-0028-053	423-0028-055	5		545	
118	423-0029-051	423-0029-056	423-0029-052	423-0029-054	423-0029-053	423-0029-055	5		825	
145	423-0030-051	423-0030-056	423-0030-052	423-0030-054	423-0030-053	423-0030-055	5		950	
175	223-0031-651	223-0031-656	223-0031-652	223-0031-654	223-0031-653	223-0031-655	7		DIT3	990
220	223-0032-651	223-0032-656	223-0032-652	223-0032-654	223-0032-653	223-0032-655	7			1350
275	223-0033-651	223-0033-656	223-0033-652	223-0033-654	223-0033-653	223-0033-655	7			1560
330	223-0034-651	223-0034-656	223-0034-652	223-0034-654	223-0034-653	223-0034-655	7	1650		
440	223-0035-651	223-0035-656	223-0035-652	223-0035-654	223-0035-653	223-0035-655	7	2000		
550	223-0036-651	223-0036-656	223-0036-652	223-0036-654	223-0036-653	223-0036-655	7	2500		

‡ Copper windings available. Contact factory for details.

Note: Mounting dimensions subject to change without notice. Contact factory where dimension verification is critical.



Case Dimensions

KVA Range	Fig.	Height A (in.)	Width B (in.)	Depth C (in.)
3 – 6	4	13.12	15.12	8.06
7.5 – 11	4	15.12	19.00	9.06
14 – 40	5	28.63	21.37	16.04
51 – 75	5	31.50	24.12	16.79
93 – 145	5	36.00	29.49	27.79
175	7	51.90	35.60	25.40
220 – 330	7	51.90	35.60	25.40
440 – 550	7	68.00	48.00	34.00

Drive Isolation Transformers

Products

- *Three-Phase Encapsulated: 3 KVA through 11 KVA**
- *Three-Phase Ventilated: 14 KVA through 550 KVA**

Applications

- *For industrial and commercial applications with SCR-controlled adjustable speed motor drives, and AC adjustable frequency or DC drives*

Specifications

- *Complete KVA range to cover all standard drive systems*
- *Cores of high quality electrical steel*
- *NEMA 3R-rated enclosures standard on 3 KVA through 11 KVA units*
- *NEMA 1-rated enclosures standard on 14 KVA through 550 KVA units*
- *Electrostatically shielded for clean power and reduction of "notching" effect on secondary winding*
- *Delta primary, wye secondary to match common power sources in most three-phase rectified circuits*
- *150°C temperature rise standard on 220°C insulation class units*
- *Heat-applied ASA-61 gray power coat finish*
- **Made in U.S.A.**

Features, Functions, Benefits

- *Large connection compartment for ease of wiring and installation*
- *Internally braced for short circuit stress protection*
- *Low impedance for better voltage regulation*
- *Low flux density to minimize core saturation*
- *Tap arrangements provided to compensate for input voltage variation*
- *Quiet operation for installation flexibility*

Standards

- *Built in accordance with NEMA, ANSI, UL and CSA standards*

*Options and Accessories

- *CE Marked units available as custom*
- *80°C and 115°C temperature rise available*
- *Wall mount brackets available on units up to 75 KVA*
- *Weathershields available on units 14 KVA through 550 KVA*
- *Copper windings available*

Drive Isolation Transformers

Designed for use with motor drives, the drive isolation transformer must isolate the motor from the line and handle the added loads of the drive-created harmonics. Jefferson Electric drive isolation transformers are custom engineered for both AC adjustable frequency and DC motor drives. They are specifically designed to accommodate the electrical and mechanical stresses, regenerative current reversals and frequent short circuits inherent in severe drive duty cycles.

Drive Selector Chart

To determine the proper size drive isolation transformer, locate the HP of the motors to be operated in the left hand column. The corresponding figure in the right hand column is the recommended transformer KVA. Use the selection table to determine the drive isolation transformer catalog number.

SELECTOR CHART	
HP	KVA
2	3
3	6
5	7.5
7.5	11
10	14
15	20
20	27
25	34
30	40
40	51
50	63
60	75
75	93
100	118
125	145
150	175
200	220
250	275
300	330
400	440
500	550

Drive Isolation Transformers

Figure 4

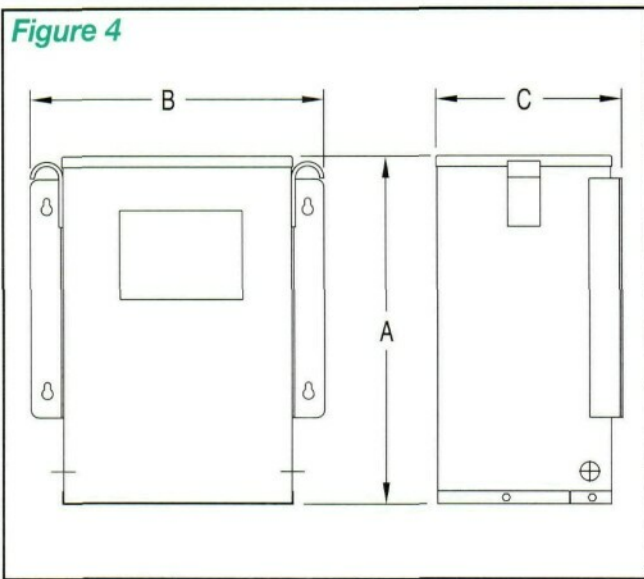


Figure 5

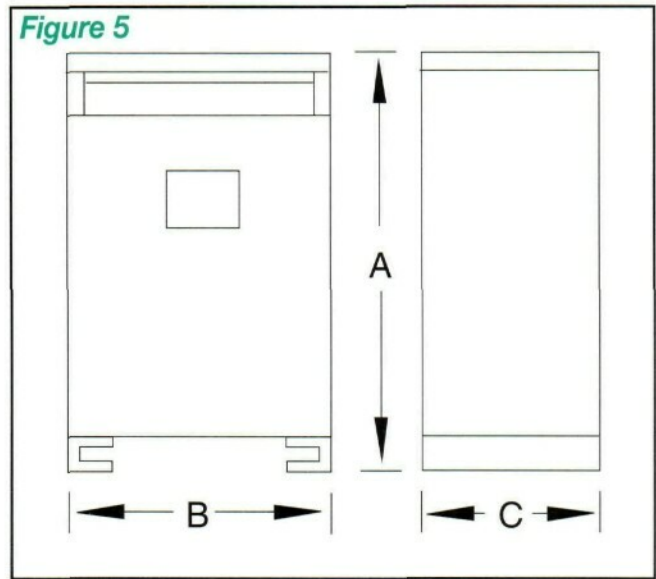


Figure 7

