7

3 to 990 KVA

Contents

Overview	7.2
Drive Selector	7.3
Dimensional Drawings	7.5
Wiring Diagrams	7.6
Selection Charts	
230 V - 230Y/133 V	7.4
230 V - 460Y/266 V	7.4
460 V - 230Y/133 V	7.4
460 V - 460Y/266 V	7.4
575 V - 230Y/133 V	7.4
575 V - 460Y/266 V	7.4

Version JE901 0411

Drive Isolation

Products

- *Three-Phase Encapsulated: 3 KVA through 11 KVA**
- *Three-Phase Ventilated: 14 KVA through 990 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 990 KVA units*
- *3 KVA through 11 KVA, 135°C temperature rise*
- *14 KVA through 990 KVA, 150°C temperature rise 0n 220°C insulation class units*
- *150ºC temperature rise standard on 220°C insulation class units*
- *Heat-cured ASA-61 gray powder coat finish*

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*
- *80ºC and 115ºC temperature rise available*
- *Wall mount brackets available on units up to 75 KVA and 150°C temperature rise*
- *Weathershields available on units 14 KVA through 990 KVA*
- *Copper windings available*

Drive Isolation

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

Version JE901 0411

Drive Isolation (DIT) 230 Volt Primary

KVA	Catalog Number	Fig	Height A (in.)	Width B (in.)	Depth C (in.)	Est. Ship Wgt. (lbs)	Wiring Diagram	Weather Shield Kit
Primary 230 V Delta (Secondary 230Y/133) Taps: 1@ 5%FCAN, 1@ 5% FCBN								
3	413-6ACC-000	4	13	15	8.06	82	DIT-CC	N/A
6	413-6BCC-000	4	13	15	8.06	119	DIT-CC	N/A
7.5	413-6CCC-000	4	15	19	9.06	157	DIT-CC	N/A
11	413-6DCC-000	4	15	19	9.06	228	DIT-CC	N/A
14	423-6ECC-000	7	22	19	16	255	DIT-CC	423-0007-019
20	423-6FCC-000	7	22	19	16	255	DIT-CC	423-0007-019
27	423-6GCC-000	7	25	22	17	295	DIT-CC	423-0007-022
34	423-6HCC-000	7	25	22	17	295	DIT-CC	423-0007-022
40	423-6JCC-000	7	28	25	19	350	DIT-CC	423-0007-025
51	423-6KCC-000	7	28	25	19	350	DIT-CC	423-0007-025
63	423-6LCC-000	7	32	27	21	535	DIT-CC	423-0007-027
75	423-6MCC-000	7	32	27	21	535	DIT-CC	423-0007-027
93	423-6NCC-000	7	38	29	23	675	DIT-CC	423-0007-029
118	423-6PCC-000	7	38	29	23	835	DIT-CC	423-0007-029
145	423-6RCC-000	7	42	33	26	980	DIT-CC	423-0007-033
175	423-6SCC-000	7	46	35	30	1200	DIT-CC	423-0007-035
220	423-6TCC-000	7	46	35	30	1380	DIT-CC	423-0007-035
275	423-6UCC-000	7	46	35	30	1590	DIT-CC	423-0007-035
330	423-6VCC-000	7	60	48	33	1680	DIT-CC	423-0007-048
440	423-6WCC-000	7	60	48	33	2030	DIT-CC	423-0007-048
550	423-6XCC-000	7	60	48	33	2530	DIT-CC	423-0007-048
Primary 230 V Delta (Secondary 460Y/266) Taps: 1@ 5%FCAN, 1@ 5% FCBN								
3	413-6ACG-000	4	13	15	8.06	82	DIT-CG	N/A
6	413-6BCG-000	4	13	15	8.06	119	DIT-CG	N/A
7.5	413-6CCG-000	4	15	19	9.06	157	DIT-CG	N/A
11	413-6DCG-000	4	15	19	9.06	228	DIT-CG	N/A
14	423-6ECG-000	7	22	19	16	255	DIT-CG	423-0007-019
20	423-6FCG-000	7	22	19	16	255	DIT-CG	423-0007-019
27	423-6GCG-000	7	25	22	17	295	DIT-CG	423-0007-022
34	423-6HCG-000	7	25	22	17	295	DIT-CG	423-0007-022
40	423-6JCG-000	7	28	25	19	350	DIT-CG	423-0007-025
51	423-6KCG-000	7	28	25	19	350	DIT-CG	423-0007-025
63	423-6LCG-000	7	32	27	21	445	DIT-CG	423-0007-027
75	423-6MCG-000	7	32	27	21	535	DIT-CG	423-0007-027
93	423-6NCG-000	7	38	29	23	675	DIT-CG	423-0007-029
118	423-6PCG-000	7	38	29	23	835	DIT-CG	423-0007-029
145	423-6RCG-000	7	42	33	26	980	DIT-CG	423-0007-033
175	423-6SCG-000	7	46	35	30	1200	DIT-CG	423-0007-035
220	423-6TCG-000	7	46	35	30	1380	DIT-CG	423-0007-035
275	423-6UCG-000	7	46	35	30	1590	DIT-CG	423-0007-035
330	423-6VCG-000	7	60	48	33	1680	DIT-CG	423-0007-048
440	423-6WCG-000	7	60	48	33	2030	DIT-CG	423-0007-048
550	423-6XCG-000	7	60	48	33	2530	DIT-CG	423-0007-048

** For 551-990 kVA please call factory. **

Drive Isolation (DIT) 460 Volt Primary

KVA	Catalog Number	Fig	Height A (in.)	Width B (in.)	Depth C (in.)	Est. Ship Wgt. (lbs)	Wiring Diagram	Weather Shield Kit
Primary 460 V Delta (Secondary 230Y/133) Taps: 1@ 5%FCAN, 1@ 5% FCBN								
3	413-6AGC-000	4	13	15	8.06	82	DIT-GC	N/A
6	413-6BGC-000	4	13	15	8.06	119	DIT-GC	N/A
7.5	413-6CGC-000	4	15	19	9.06	157	DIT-GC	N/A
11	413-6DGC-000	4	15	19	9.06	228	DIT-GC	N/A
14	423-6EGC-000	7	22	19	16	255	DIT-GC	423-0007-019
20	423-6FGC-000	7	22	19	16	255	DIT-GC	423-0007-019
27	423-6GGC-000	7	25	22	17	295	DIT-GC	423-0007-022
34	423-6HGC-000	7	25	22	17	295	DIT-GC	423-0007-022
40	423-6JGC-000	7	28	25	19	350	DIT-GC	423-0007-025
51	423-6KGC-000	7	28	25	19	350	DIT-GC	423-0007-025
63	423-6LGC-000	7	32	27	21	535	DIT-GC	423-0007-027
75	423-6MGC-000	7	32	27	21	535	DIT-GC	423-0007-027
93	423-6NGC-000	7	38	29	23	675	DIT-GC	423-0007-029
118	423-6PGC-000	7	38	29	23	835	DIT-GC	423-0007-029
145	423-6RGC-000	7	42	33	26	980	DIT-GC	423-0007-033
175	423-6SGC-000	7	46	35	30	1200	DIT-GC	423-0007-035
220	423-6TGC-000	7	46	35	30	1380	DIT-GC	423-0007-035
275	423-6UGC-000	7	46	35	30	1590	DIT-GC	423-0007-035
330	423-6VGC-000	7	60	48	33	1680	DIT-GC	423-0007-048
440	423-6WGC-000	7	60	48	33	2030	DIT-GC	423-0007-048
550	423-6XGC-000	7	60	48	33	2530	DIT-GC	423-0007-048
Primary 460 V Delta (Secondary 460Y/266) Taps: 1@ 5%FCAN, 1@ 5% FCBN								
3	413-6AGG-000	4	13	15	8.06	82	DIT-GG	N/A
6	413-6BGG-000	4	13	15	8.06	119	DIT-GG	N/A
7.5	413-6CGG-000	4	15	19	9.06	157	DIT-GG	N/A
11	413-6DGG-000	4	15	19	9.06	228	DIT-GG	N/A
14	423-6EGG-000	7	22	19	16	255	DIT-GG	423-0007-019
20	423-6FGG-000	7	22	19	16	255	DIT-GG	423-0007-019
27	423-6GGG-000	7	25	22	17	295	DIT-GG	423-0007-022
34	423-6HGG-000	7	25	22	17	295	DIT-GG	423-0007-022
40	423-6JGG-000	7	28	25	19	350	DIT-GG	423-0007-025
51	423-6KGG-000	7	28	25	19	350	DIT-GG	423-0007-025
63	423-6LGG-000	7	32	27	21	535	DIT-GG	423-0007-027
75	423-6MGG-000	7	32	27	21	535	DIT-GG	423-0007-027
93	423-6NGG-000	7	38	29	23	675	DIT-GG	423-0007-029
118	423-6PGG-000	7	38	29	23	835	DIT-GG	423-0007-029
145	423-6RGG-000	7	42	33	26	980	DIT-GG	423-0007-033
175	423-6SGG-000	7	46	35	30	1200	DIT-GG	423-0007-035
220	423-6TGG-000	7	46	35	30	1380	DIT-GG	423-0007-035
275	423-6UGG-000	7	46	35	30	1590	DIT-GG	423-0007-035
330	423-6VGG-000	7	60	48	33	1680	DIT-GG	423-0007-048
440	423-6WGG-000	7	60	48	33	2030	DIT-GG	423-0007-048
550	423-6XGG-000	7	60	48	33	2530	DIT-GG	423-0007-048

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Version JE901 0411

Drive Isolation (DIT) 575 Volt Primary

KVA	Catalog Number	Fig	Height A (in.)	Width B (in.)	Depth C (in.)	Est. Ship Wgt. (lbs)	Wiring Diagram	Weather Shield Kit
Primary 575 V Delta (Secondary 230Y/133) Taps: 1@ 5%FCAN, 1@ 5% FCBN								
3	413-6ALC-000	4	13	15	8.06	82	DIT-LC	N/A
6	413-6BLC-000	4	13	15	8.06	119	DIT-LC	N/A
7.5	413-6CLC-000	4	15	19	9.06	157	DIT-LC	N/A
11	413-6DLC-000	4	15	19	9.06	228	DIT-LC	N/A
14	423-6ELC-000	7	22	19	16	255	DIT-LC	423-0007-019
20	423-6FLC-000	7	22	19	16	255	DIT-LC	423-0007-019
27	423-6GLC-000	7	25	22	17	295	DIT-LC	423-0007-022
34	423-6HLC-000	7	25	22	17	295	DIT-LC	423-0007-022
40	423-6JLC-000	7	28	25	19	350	DIT-LC	423-0007-025
51	423-6KLC-000	7	28	25	19	350	DIT-LC	423-0007-025
63	423-6LLC-000	7	32	27	21	535	DIT-LC	423-0007-027
75	423-6MLC-000	7	32	27	21	535	DIT-LC	423-0007-027
93	423-6NLC-000	7	38	29	23	675	DIT-LC	423-0007-029
118	423-6PLC-000	7	38	29	23	835	DIT-LC	423-0007-029
145	423-6RLC-000	7	42	33	26	980	DIT-LC	423-0007-033
175	423-6SLC-000	7	46	35	30	1200	DIT-LC	423-0007-035
220	423-6TLC-000	7	46	35	30	1380	DIT-LC	423-0007-035
275	423-6ULC-000	7	46	35	30	1590	DIT-LC	423-0007-035
330	423-6VLC-000	7	60	48	33	1680	DIT-LC	423-0007-048
440	423-6WLC-000	7	60	48	33	2030	DIT-LC	423-0007-048
550	423-6XLC-000	7	60	48	33	2530	DIT-LC	423-0007-048
Primary 575 V Delta (Secondary 460Y/266) Taps: 1@ 5%FCAN, 1@ 5% FCBN								
3	413-6ALG-000	4	13	15	8.06	82	DIT-LG	N/A
6	413-6BLG-000	4	13	15	8.06	119	DIT-LG	N/A
7.5	413-6CLG-000	4	15	19	9.06	157	DIT-LG	N/A
11	413-6DLG-000	4	15	19	9.06	228	DIT-LG	N/A
14	423-6ELG-000	7	22	19	16	255	DIT-LG	423-0007-019
20	423-6FLG-000	7	22	19	16	255	DIT-LG	423-0007-019
27	423-6GLG-000	7	25	22	17	295	DIT-LG	423-0007-022
34	423-6HLG-000	7	25	22	17	295	DIT-LG	423-0007-022
40	423-6JLG-000	7	28	25	19	350	DIT-LG	423-0007-025
51	423-6KLG-000	7	28	25	19	350	DIT-LG	423-0007-025
63	423-6LLG-000	7	32	27	21	535	DIT-LG	423-0007-027
75	423-6MLG-000	7	32	27	21	535	DIT-LG	423-0007-027
93	423-6NLG-000	7	38	29	23	675	DIT-LG	423-0007-029
118	423-6PLG-000	7	38	29	23	835	DIT-LG	423-0007-029
145	423-6RLG-000	7	42	33	26	980	DIT-LG	423-0007-033
175	423-6SLG-000	7	46	35	30	1200	DIT-LG	423-0007-035
220	423-6TLG-000	7	46	35	30	1380	DIT-LG	423-0007-035
275	423-6ULG-000	7	46	35	30	1590	DIT-LG	423-0007-035
330	423-6VLG-000	7	60	48	33	1680	DIT-LG	423-0007-048
440	423-6WLG-000	7	60	48	33	2030	DIT-LG	423-0007-048
550	423-6XLG-000	7	60	48	33	2530	DIT-LG	423-0007-048

** For 551-990 kVA please call factory. **

Figure 4

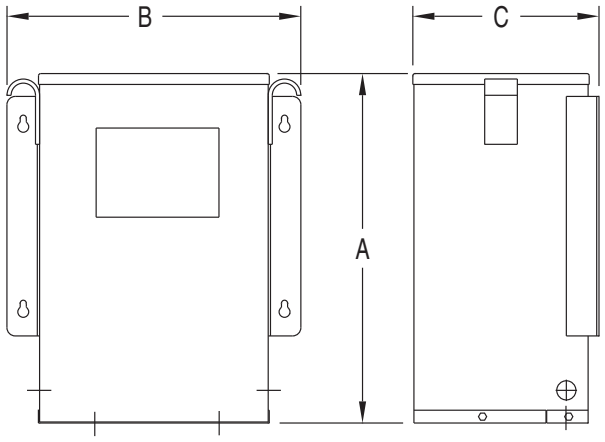
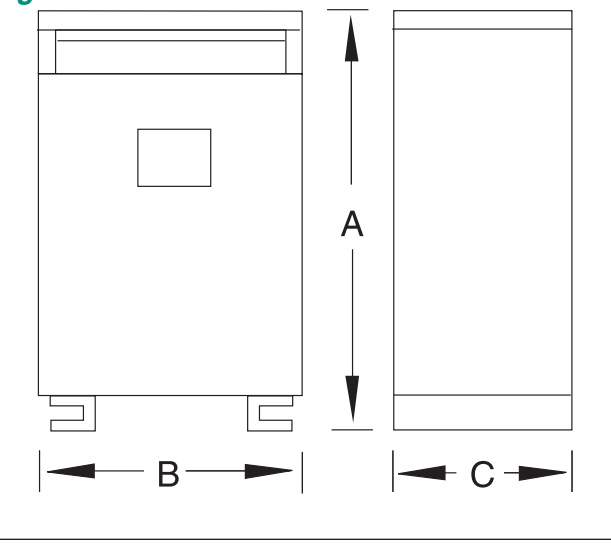


Figure 7

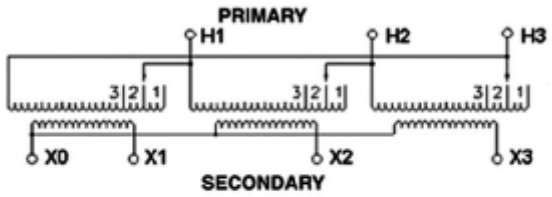


Version JE901 0411

DIT CC Wiring Diagram & Connections

Wiring Diagram

Primary: 230 | Secondary: 230Y/133 Volts



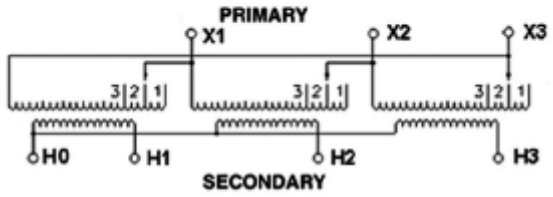
Connections

Primary Volts	On Each Coil Jumper Taps To	Primary Lines Connect To
242	1	H1, H2, H3
230	2	H1, H2, H3
218	3	H1, H2, H3
Sec. Volts		**Secondary Lines Connect To**
230		X1, X2, X3
133 1 Phase		Between X0 and X1 or X2 or X3

DIT CG Wiring Diagram & Connections

Wiring Diagram

Primary: 230 | Secondary: 460Y/266 Volts



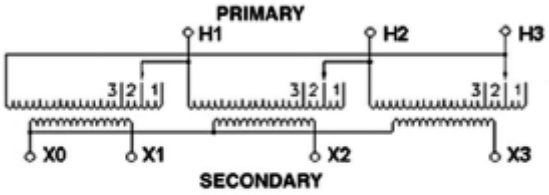
Connections

Primary Volts	On Each Coil Jumper Taps To	Primary Lines Connect To
242	1	X1, X2, X3
230	2	X1, X2, X3
218	3	X1, X2, X3
Sec. Volts		**Secondary Lines Connect To**
460		H1, H2, H3
266 1 Phase		Between H0 and H1 or H2 or H3

DIT GC Wiring Diagram & Connections

Wiring Diagram

Primary: 460 | Secondary: 230Y/133 Volts



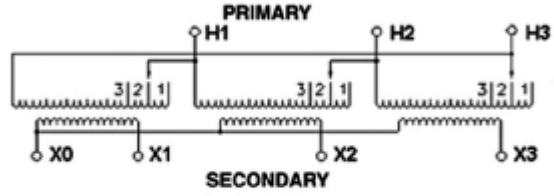
Connections

Primary Volts	On Each Coil Jumper Taps To	Primary Lines Connect To
483	1	H1, H2, H3
460	2	H1, H2, H3
437	3	H1, H2, H3
Sec. Volts		**Secondary Lines Connect To**
230		X1, X2, X3
133 1 Phase		Between X0 and X1 or X2 or X3

DIT GG Wiring Diagram & Connections

Wiring Diagram

Primary: 460 | Secondary: 460Y/266 Volts



Connections

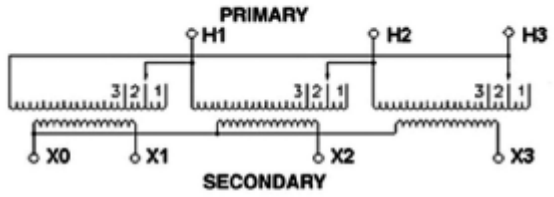
Primary Volts	On Each Coil Jumper Taps To	Primary Lines Connect To
483	1	H1, H2, H3
460	2	H1, H2, H3
437	3	H1, H2, H3
Sec. Volts		**Secondary Lines Connect To**
460		X1, X2, X3
266		Between X0 and X1 or X2 or X3

NOTE: Electrostatic shields are optionally available and not shown in all wiring diagrams. * Insulate unused taps individually.

DIT LC Wiring Diagram & Connections

Wiring Diagram

Primary: 575 Secondary: 230Y/133 Volts



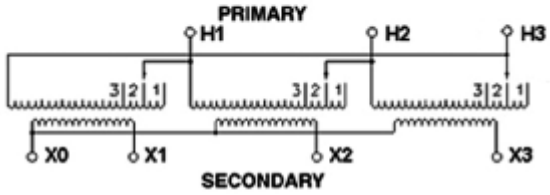
Connections

Primary Volts	On Each Coil Jumper Taps To	Primary Lines Connect To
604	1	H1, H2, H3
575	2	H1, H2, H3
546	3	H1, H2, H3
Sec. Volts		**Secondary Lines Connect To**
230		X1, X2, X3
133		Between X0 and X1 or X2 or X3

DIT LG Wiring Diagram & Connections

Wiring Diagram

Primary: 575 Secondary: 460Y/266 Volts



Connections

Primary Volts	On Each Coil Jumper Taps To	Primary Lines Connect To
604	1	H1, H2, H3
575	2	H1, H2, H3
546	3	H1, H2, H3
Sec. Volts		**Secondary Lines Connect To**
460		X1, X2, X3
266		Between X0 and X1 or X2 or X3

Version JE901 0411

Notes: