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# DRIVE ISOLATION TRANSFORMERS DIT SERIES

## DRY TYPE

SINGLE PHASE  
THREE PHASE

*THREE PHASE UL LISTED 12-550 KVA*

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# DRIVE ISOLATION TRANSFORMERS DIT SERIES DRY TYPE

SINGLE PHASE  
THREE PHASE

## GENERAL DESCRIPTION

Hitrans DIT Series Drive Isolation Transformers are designed and manufactured to meet the specific requirements of SCR motor drive applications. These units provide maximum isolation to components of drive systems and reduce line pollution feedback from SCR firing circuits. The 3 Phase DIT delta-wye configuration meets NEC requirements for full capacity secondary neutrals that are isolated from primary distribution systems and available for grounding. Overall, construction is energy efficient yet rugged enough to withstand the severe electrical and mechanical conditions associated with motor drives.

The KVA ratings available in the DIT Series are standard NEMA ratings which cover a wide range of DC motor sizes from 5 to 1000 horsepower. The advantages offered by these transformers include: better regulation, greater efficiency and overload capacity, lower losses and energy consumption.

## STANDARD FEATURES

**RELIABLE** – UL listed 220 °C Class H insulation for 150 °C rise over 40° ambient, resists degradation due to thermal cycling, moisture and other corrosive elements.

**QUIET** – Precision core assemblies of high quality grain oriented silicon steel and coil configurations, isolated from the case to minimize vibration and noise.

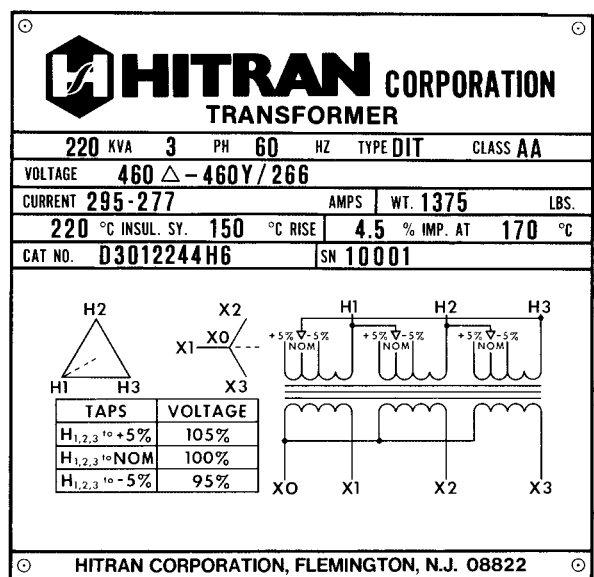
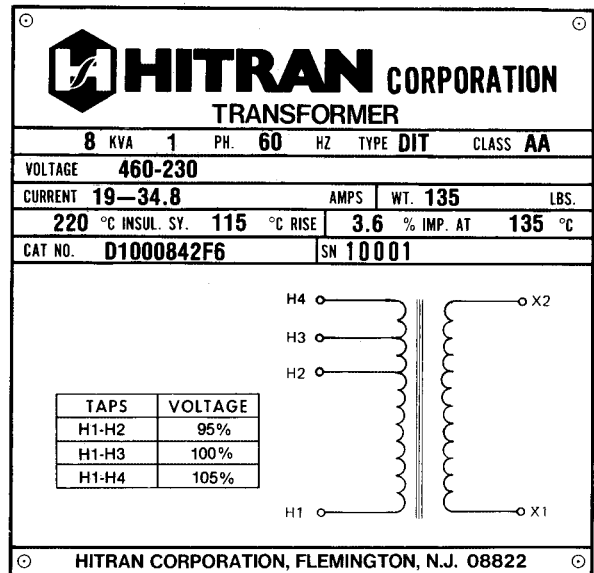
**VERSATILE** – Full capacity secondary neutral brought out to termination and convenient 2-5 percent primary taps, 1-FCAN and 1-FCBN accommodates installation requirements.

**COOL** – Duct coil construction and natural-draft ventilation, provided by full width air-recirculation vents at top of case with rodent proof expanded steel at bottom, assure maximum cooling.

**DURABLE** – Standard NEMA-1 enclosures of heavy gauge phosphatized steel and reinforced for extra strength, with an attractive long lasting enamel finish.

## OPTIONAL FEATURES

- Special voltage and/or 50Hz configurations available.
- Lower temperature rise, UL recognized insulation systems.
- Weather shields for outdoor or severe environmental conditions.
- Thermal guards available n.o. or n.c., protect transformer from over-heating conditions due to excessive loads.
- Wall mounting brackets for sizes through 93 KVA.
- Open frame construction to meet cost and/or custom installation needs.



Typical DIT Series Data Plates

# DIT SERIES SPECIFICATIONS SINGLE PHASE



SINGLE PHASE • 60 HZ • 600 VOLT CLASS • 150°C RISE/220°C CLASS • NEMA 1 ENCLOSED						
KVA	CATALOG NUMBER*	DIMENSIONS (INCHES)**			APPROX WT. (LBS)	TYPE*** MOUNTING
		H	W	D		
1	D10001PSF6	12	9	10	50	Wall
1.5	D10002PSF6	13	9	10	60	Wall
3	D10003PSF6	15	9	10	70	Wall
5	D10005PSF6	17	10	10	100	Wall
8	D10008PSF6	18	10	10	135	Wall
12	D10012PSH6	22	18	17	165	Floor
15	D10015PSH6	22	18	17	190	Floor
20	D10020PSH6	22	18	17	225	Floor
27	D10027PSH6	33	24	20	270	Floor
30	D10030PSH6	33	24	20	300	Floor
34	D10034PSH6	33	24	20	330	Floor

*\*Standard Primary and Secondary Voltages available.  
(Insert code number listed for the respective letter in catalog number.)*

P = Primary Voltage	Code No.	S = Secondary Voltage	Code No.
208±5% .....	1	208 .....	1
230±5% .....	2	230 .....	2
380±5% .....	3	380 .....	3
460±5% .....	4	460 .....	4
575±5% .....	5	575 .....	5
230/460 (No taps) .....	6	230 X 460 .....	6
415±5% .....	7	415 .....	7

*Lower Temperature Rise Option available at slight extra cost.  
(Replace "H" in next to last field of catalog number with code letter listed for desired temperature rise.)*

Temp Rise/Insulation Class	Code Letter
115°C rise/220°C Class .....	F (Standard Rise for 1-8 KVA)
80°C rise/220°C Class .....	B
55°C rise/220°C Class .....	A

*50 Hertz Option available at slight extra cost.  
(Replace "6" in last field of catalog number with "5")*

\*\*Dimensions listed are not to be used for construction purposes.  
\*\*\*Standard units are designed for floor mounting. Wall mounting brackets are available through 93KVA at slight extra cost.



# DIT SERIES SPECIFICATIONS THREE PHASE

THREE PHASE • DELTA PRIMARY • WYE SECONDARY • 60 HZ • 600 VOLT CLASS • 150°C CLASS • NEMA 1 ENCLOSED							
HP	KVA	CATALOG NUMBER*	DIMENSIONS (INCHES)**			APPROX WT LBS	TYPE*** MOUNTING
			H	W	D		
1.0	3.0	D30003PSF6	22	16	14	95	Floor
3.0	6.0	D30006PSF6	22	16	14	130	Floor
5.0	8.0	D30008PSH6	22	16	14	150	Floor
7.5	12.0	D30012PSH6	26	24	20	155	Floor
10.0	15.0	D30015PSH6	26	24	20	170	Floor
15.0	20.0	D30020PSH6	26	24	20	200	Floor
20.0	27.0	D30027PSH6	26	24	20	235	Floor
25.0	34.0	D30034PSH6	26	24	20	280	Floor
30.0	40.0	D30040PSH6	26	24	20	310	Floor
40.0	51.0	D30051PSH6	26	24	20	365	Floor
50.0	63.0	D30063PSH6	26	24	20	410	Floor
60.0	75.0	D30075PSH6	33	28	25	515	Floor
75.0	93.0	D30093PSH6	33	28	25	575	Floor
100.0	120.0	D30112PSH6	33	28	25	710	Floor
125.0	150.0	D30115PSH6	33	28	25	820	Floor
150.0	180.0	D30118PSH6	48	40	32	1050	Floor
200.0	220.0	D30122PSH6	48	40	32	1250	Floor
250.0	280.0	D30128PSH6	48	40	32	1400	Floor
300.0	330.0	D30133PSH6	52	60	34	1950	Floor
400.0	440.0	D30144PSH6	52	60	34	2420	Floor
500.0	550.0	D30155PSH6	52	60	34	2900	Floor
600.0	660.0	D30166PSH6	54	60	40	3250	Floor
700.0	760.0	D30176PSH6	54	60	48	3500	Floor
800.0	870.0	D30187PSH6	54	60	48	3800	Floor
900.0	980.0	D30198PSH6	72	68	48	4700	Floor
1000.0	1100.0	D30211PSH6	72	68	48	5100	Floor

\*Standard Primary and Secondary Voltages available  
(Insert code number listed for the respective letter in catalog number.)

P = Primary Voltage	Code No.	S = Secondary Voltage	Code No.
208±5%Δ	.....1	208Y/120	.....1
230±5%Δ	.....2	230Y/133	.....2
380±5%Δ	.....3	380Y/220	.....3
460±5%Δ	.....4	460Y/266	.....4
575±5%Δ	.....5	575Y/332	.....5
230/460(No taps)Δ	.....6	230 X 460Y/133 X 266****	.....6
415±5%Δ	.....7	415Y/240	.....7

Lower Temperature Rise Option available at slight extra cost.

(Replace "H" in next to last field of catalog number with code letter listed for desired temperature rise.)

Temp Rise/Insulation Class	Code Letter
115°C rise/220°C Class	.....F
80°C rise/220°C Class	.....B
55°C rise/220°C Class	.....A

50 Hertz Option available at slight extra cost.

(Replace "6" in last field of catalog number with "5")

\*\*Dimensions listed are not to be used for construction purposes.  
 \*\*\*Standard units are designed for floor mounting.  
 Wall mounting brackets are available through 93KVA at slight extra cost.  
 \*\*\*\*Primary or Secondary Code #6 is available at Standard Price through 93 KVA only.  
 Please consult the factory for prices on larger units.