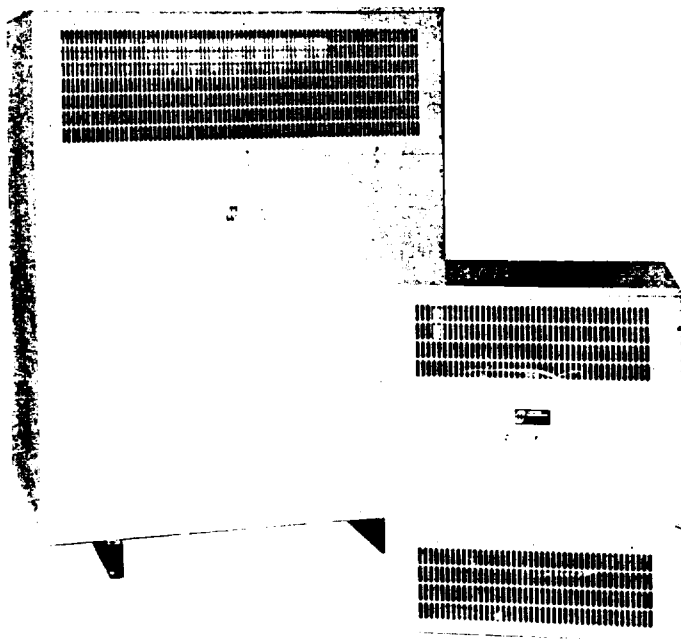




DRIVE ISOLATION TRANSFORMERS



With today's technological advances in the solid-state power control device, the use of AC and DC variable speed drives has proliferated in many industrial markets. General purpose distribution transformers, in many cases, are not adequate for this type of application.

Hammond's Drive Isolation Transformers are designed to meet the rugged demands of AC and DC variable speed drives and also to provide the required voltage change to match the load operating level. The windings are torque-wound to yield low operating losses, high overload capacity and excellent mechanical stress withstand. Electrically balanced windings and high density fiberglass duct sticks in combination with the coil support structure render high axial short circuit withstand. The separate primary and secondary windings provide both magnetic and electrical isolation between the incoming line and the SCR load. Windings are designed to withstand overcurrent of 150% of the rated load for 60 seconds or 200% of the rated load for 30 seconds. A duty cycle of one start for every two hours is permitted.

The core assembly is manufactured from laminations of high grade electrical steel. Cores are designed to reduce flux density to meet the inrush characteristics of drive applications.

In lieu of the general kVA ratings common in general lighting and power installations, **Drive Isolation Transformers** are sized to match standard motor horsepower and voltage ratings. Standard sizes range from 5 to 600 HP in many standard voltages. Other non-standard sizes and voltages are also available.

FEATURES

- UL listed (File E112313), CSA certified (File LR3902)
- standard 60 Hz units
- standard voltage taps:
7.5-175 kVA 1-5.0% FCAN & FCBN
220-660 kVA 2-2.5% FCAN & FCBN
- neutral terminal for field connection
- 220°C insulation system, 150°C Rise
- heavy duty ventilated NEMA 1 enclosure, finished in ANSI 61 grey
- front accessible separate High and Low voltage terminations, suitable for copper and aluminum, are provided for easy cable installation
- standard knock-outs for conduit entry on units up to 175 kVA
- typically 4-6% impedance
- 7.5-175 kVA units are suitable for either floor mounting or wall mounting with integral wall brackets; larger units are for floor mounting only
- meets UL and CSA short circuit withstand capability

OPTIONS

- 50 Hz units
- thermostats with 1-NC contact in each coil, wired in series – add suffix "T" to part number
- electrostatic shield (typically 60dB attenuation) – add suffix "S" to part number
- NEMA type 2 or outdoor 3R enclosure
- core and coil construction
- other horsepower or kVA sizes
- other voltages, not listed
- extra primary taps
- copper wound units

Please consult your nearest Hammond Sales Office for details.

ORDERING INFORMATION



SELECTION INSTRUCTIONS

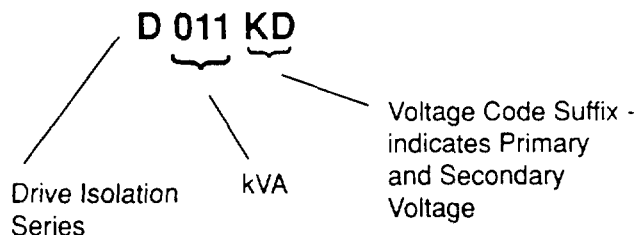
Select the transformer size according to the recommendations from the Motor Drive System manufacturer.

Alternatively, use the table below to select the transformer kVA for the required Motor H.P.

Motor H.P.	Transformer kVA
5	7.5
7.5	11
10	14
15	20
20	27
25	34
30	40
40	51
50	63
60	75

Motor H.P.	Transformer kVA
75	93
100	118
125	145
150	175
200	220
250	275
300	330
400	440
500	550
600	660

PART NUMBERING SYSTEM



VOLTAGE CODE & WIRING DIAGRAM TABLE

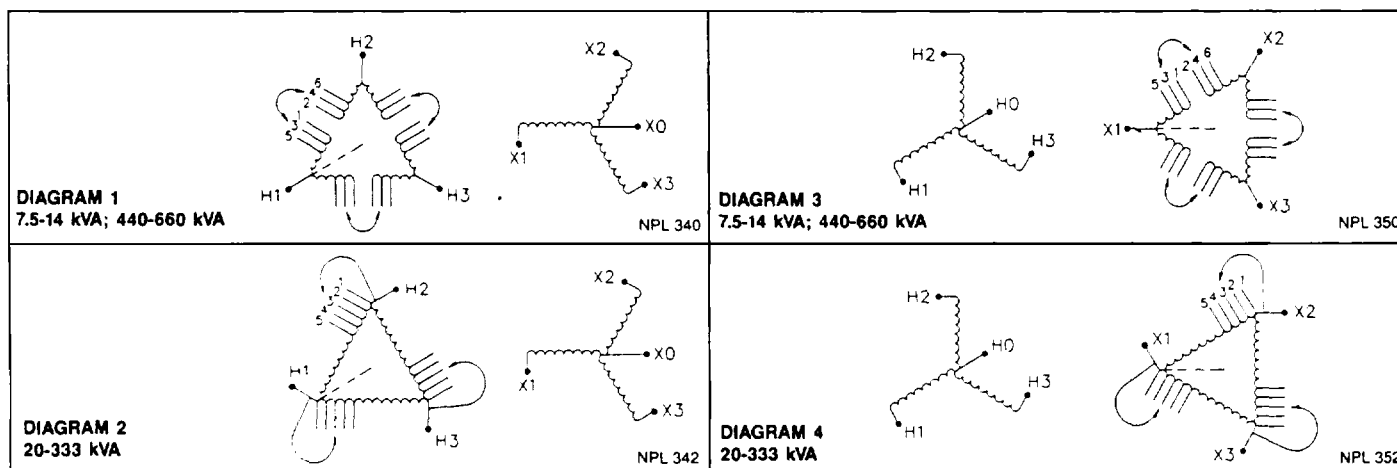
Primary Voltage	Secondary Voltage	Voltage Code Suffix	Wiring Diagram
208	208	BB	1 or 2
208	230	BC	3 or 4
208	380	BG	3 or 4
208	460	BJ	3 or 4
208	480	BK	3 or 4
208	600	BP	3 or 4
230	230	CC	1 or 2
230	460	CJ	3 or 4
230	575	CN	3 or 4
240	240	DD	1 or 2
380	230	GC	1 or 2
380	380	GG	1 or 2
380	480	GK	3 or 4
460	230	JC	1 or 2
460	240	JD	1 or 2
460	380	JG	1 or 2
460	460	JJ	1 or 2
460	575	JN	3 or 4
480	240	KD	1 or 2
480	460	KJ	1 or 2
480	480	KK	1 or 2
575	230	NC	1 or 2
575	240	ND	1 or 2
575	460	NJ	1 or 2
575	480	NK	1 or 2
575	575	NN	1 or 2
600	240	PD	1 or 2
600	380	PG	1 or 2
600	460	PJ	1 or 2
600	480	PK	1 or 2
600	600	PP	1 or 2

ORDERING INSTRUCTIONS

◆ Note: when ordering, please add the voltage code suffix from the Voltage Code table to the part number.

kVA	Part Number	Case Style	Overall Dimensions (in)			Wt. lb.
			A	B	C	
7.5	D007◆	H1	19.5	16.5	19.0	140
11	D011◆	H1	19.5	16.5	19.0	155
14	D014◆	H1	19.5	16.5	19.0	175
20	D020◆	H2	24.5	20.5	24.5	230
27	D027◆	H2	24.5	20.5	24.5	250
34	D034◆	H2	24.5	20.5	24.5	280
40	D040◆	H2	24.5	20.5	24.5	320
51	D051◆	H2	24.5	20.5	24.5	420
63	D063◆	H3	30.0	24.0	32.5	540
75	D075◆	H3	30.0	24.0	32.5	580
93	D093◆	H3	30.0	24.0	32.5	630
118	D118◆	H3	30.0	24.0	32.5	725
145	D145◆	H4	33.0	26.0	36.0	900
175	D175◆	H4	33.0	26.0	36.0	1000
220	D220◆	J1	39.5	37.0	50.0	1300
275	D275◆	J1	39.5	37.0	50.0	1500
330	D330◆	J1	39.5	37.0	50.0	1700
440	D440◆	J2	45.5	41.0	59.0	2000
550	D550◆	J2	45.5	41.0	59.0	2500
660	D660◆	J3	50.0	46.0	66.0	3000

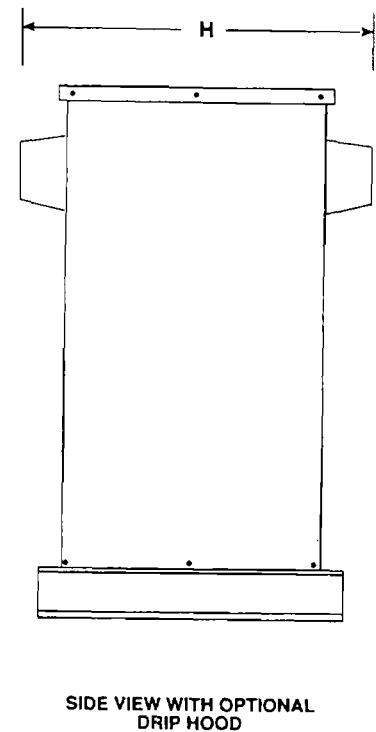
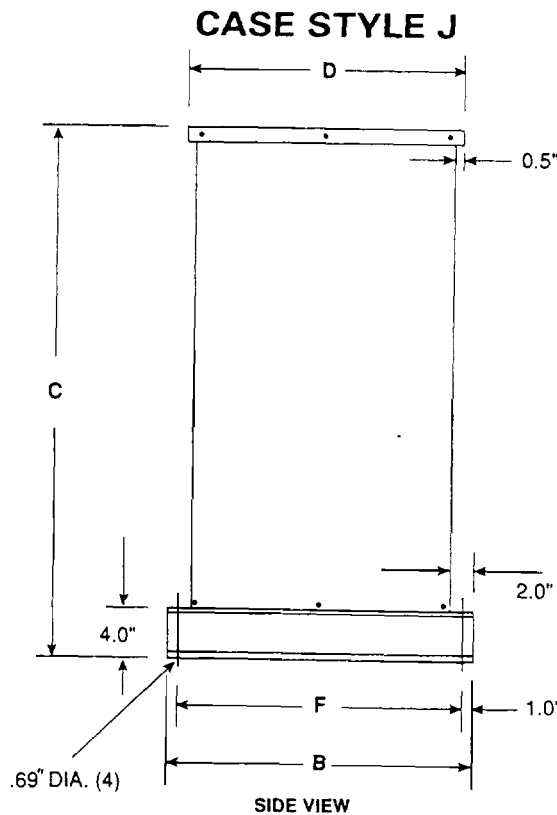
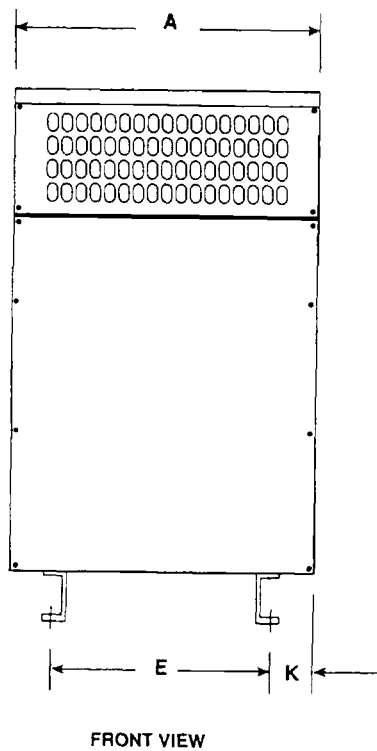
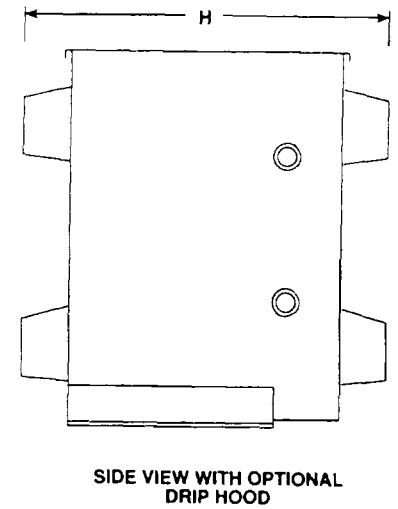
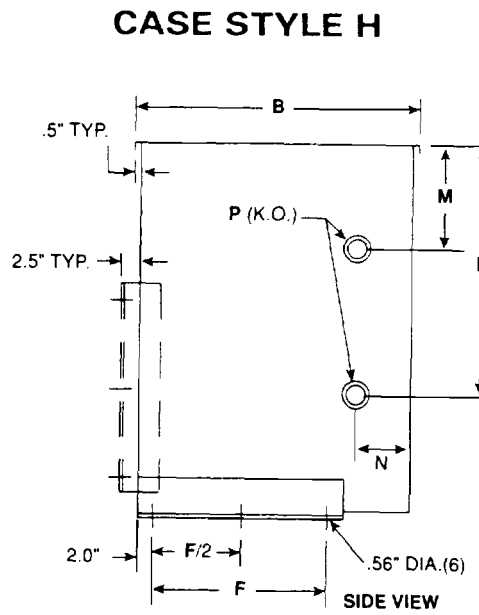
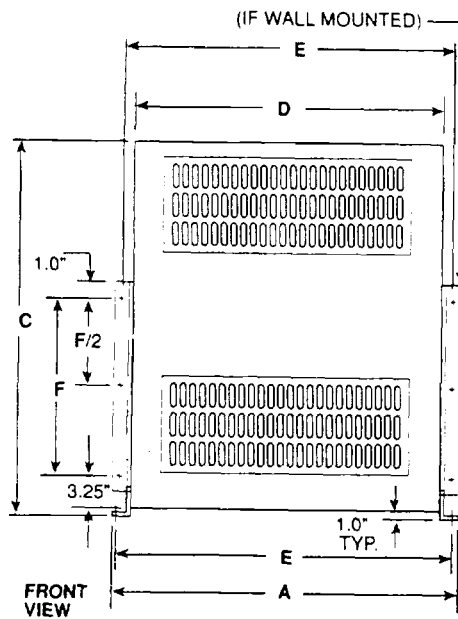
WIRING DIAGRAMS



Note: Standard voltage tap configuration varies with kVA size. Please refer to Feature Section on page 1 for standard tap details.



DIMENSION DRAWINGS

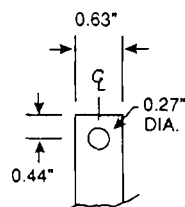


Case Style	A	B	C	D	E	F	H	K	L	M	N	P
H1	19.5	16.5	19.0	16.5	18.5	10.0	22.5	—	10.0	2.0	2.5	1.0 x 1.25
H2	24.5	20.5	24.5	21.5	23.5	10.0	26.5	—	12.0	2.5	2.5	1.0 x 2.0
H3	30.0	24.0	32.5	27.0	29.0	16.0	30.0	—	13.0	3.0	3.0	1.5 x 2.5
H4	33.0	26.0	36.0	30.0	32.0	16.0	32.0	—	13.0	3.0	3.0	1.5 x 2.5
J1	39.5	37.0	50.0	34.0	24.0	35.0	40.0	7.75	—	—	—	—
J2	45.5	41.0	59.0	38.0	27.5	39.0	44.0	9.0	—	—	—	—
J3	50.0	46.0	66.0	43.0	34.0	44.0	49.0	8.0	—	—	—	—

Note:
Dimensions are subject to change. For construction purposes please contact our Sales Office for approval drawings.

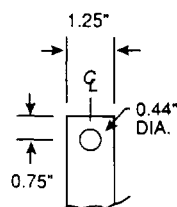
TERMINATION AWG(MCM) OR PAD SUITABLE FOR Cu/Al WIRE

kVA	208	230	240	380	Voltage 460	480	575	600	kVA
7.5	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	7.5
11	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	11
14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	14
20	#2-#14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	#6-#14	20
27	#2/0-#14	#2-#14	#2-#14	#4-#14	#4-#14	#4-#14	#4-#14	#4-#14	27
34	#2/0-#14	#2/0-#14	#2/0-#14	#4-#14	#4-#14	#4-#14	#4-#14	#4-#14	34
40	250MCM-#6 or Diag 1	#2/0-#14	#2/0-#14	#2-#14	#4-#14	#4-#14	#4-#14	#4-#14	40
51	250MCM-#6	250MCM-#6 or Diag 1	250MCM-#6 or Diag 1	#2/0-#14	#2-#14	#2-#14	#4-#14	#4-#14	51
63	350MCM-#6	250MCM-#6	250MCM-#6	#2/0-#14	#2/0-#14	#2/0-#14	#2-#14	#2-#14	63
75	Diag 2	350MCM-#6	350MCM-#6	250MCM-#6 or Diag 1	#2/0-#14	#2/0-#14	#2/0-#14	#2/0-#14	75
93	Diag 2	Diag 2	Diag 2	250MCM-#6	250MCM-#6 or Diag 1	250MCM-#6 or Diag 1	#2/0-#14	#2/0-#14	93
118	Diag 2	Diag 2	Diag 2	350MCM-#6	250MCM-#6	250MCM-#6	250MCM-#6 or Diag 1	250MCM-#6 or Diag 1	118
145	Diag 3	Diag 3	Diag 3	Diag 2	350MCM-#6	350MCM-#6	250MCM-#6	250MCM-#6	145
175	Diag 3	Diag 3	Diag 3	Diag 2	Diag 2	Diag 2	350MCM-#6	350MCM-#6	175
220	Diag 4	Diag 4	Diag 3	Diag 2	Diag 2	Diag 2	Diag 2	Diag 2	220
275	Diag 5	Diag 4	Diag 4	Diag 3	Diag 3	Diag 2	Diag 2	Diag 2	275
330	Diag 5	Diag 5	Diag 5	Diag 3	Diag 3	Diag 3	Diag 2	Diag 2	330
440	Diag 7	Diag 6	Diag 6	Diag 4	Diag 4	Diag 3	Diag 3	Diag 3	440
550	Diag 7	Diag 7	Diag 7	Diag 5	Diag 4	Diag 4	Diag 4	Diag 3	550
660	Diag 7	Diag 7	Diag 7	Diag 6	Diag 5	Diag 5	Diag 4	Diag 4	660



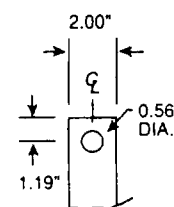
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DIAGRAM 1



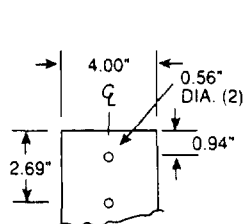
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DIAGRAM 2



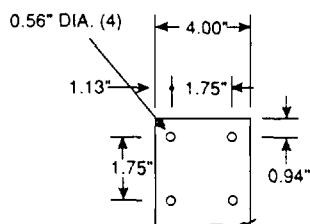
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DIAGRAM 3



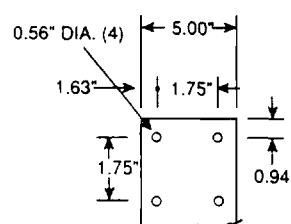
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DIAGRAM 4



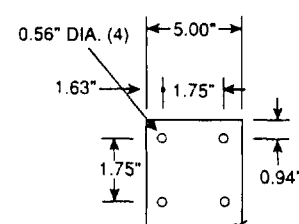
Material: 1/4" Thick Al

DIAGRAM 5



Material: 1/4" Thick Al

DIAGRAM 6



Material: 3/8" Thick Al

DIAGRAM 7