

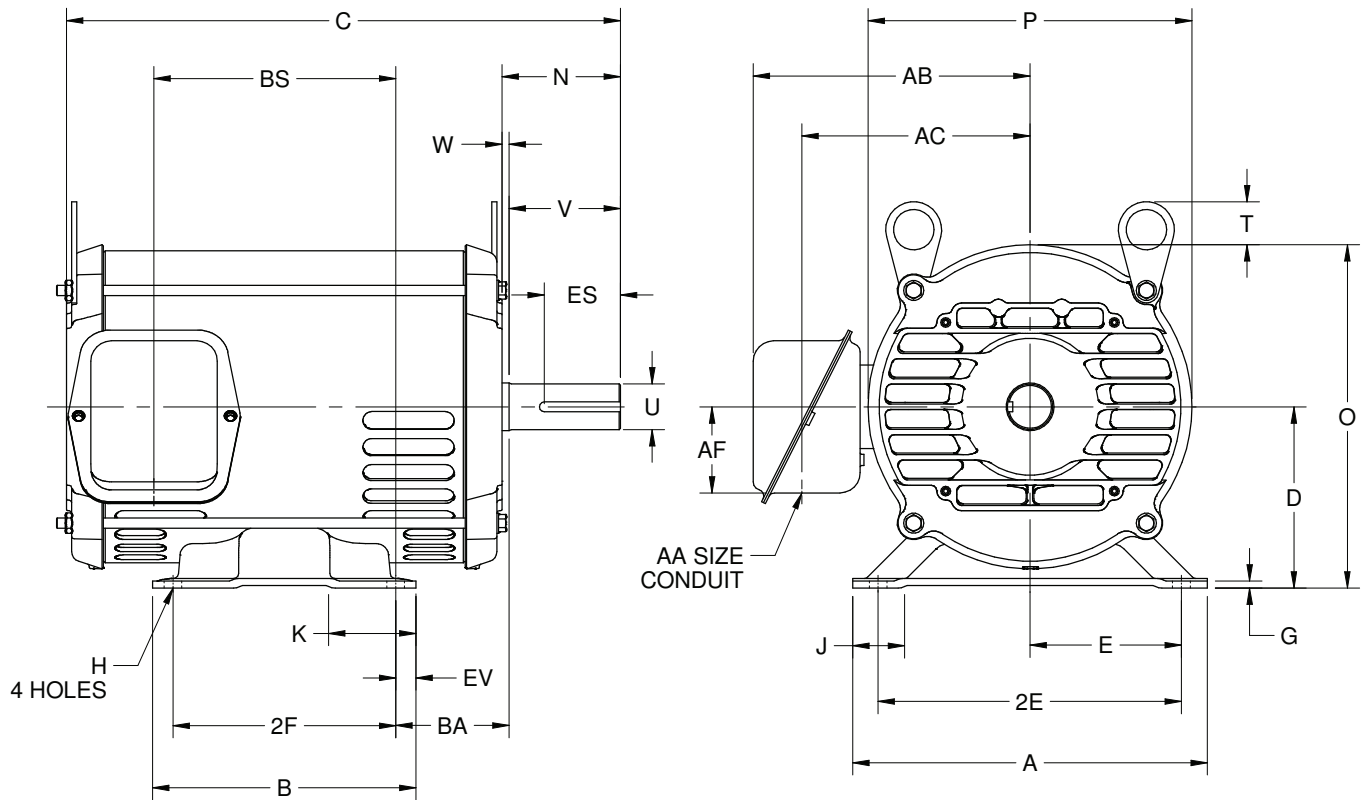
EFFECTIVE:  
**08-FEB-18**

SUPERSEDES:  
**09-APR-15**

**DIMENSION PRINT**  
OPEN DRIP PROOF  
FRAME: 182, 184T  
BASIC TYPE: D, DI

PRINT:  
**07-3196**

SHEET:  
**1 OF 1**



ALL DIMENSIONS ARE IN INCHES AND MILLIMETERS

UNITS	A	B	C	D -.06	E	2E ±.03	G	H +.05	J	K	N
IN	8.75	6.50	13.69	4.50	3.75	7.50	.19	.41	1.13	2.00	2.91
MM	222	165	348	114	95	191	5	10	29	51	74

UNITS	O	P <sup>2</sup>	T	U -.0005	V MIN	W	AA	AB	AC	AF	BA
IN	8.50	8.00	1.06	1.1250	2.50	.16	.75	6.83	5.63	2.13	2.75
MM	216	203	27	28.575	64	4		173	143	54	70

UNITS	BS	ES MIN	EV	SQ KEY
IN	5.97	1.78	.50	.250
MM	152	45	13	6.35

FRAME	UNITS	2F ±.03
182T	IN	4.50
	MM	114
184T	IN	5.50
	MM	140

1. DIMENSIONS MAY VARY .25" DUE TO CASTING AND/OR FABRICATION VARIATIONS
2. LARGEST MOTOR WIDTH
3. STANDARD ASSEMBLY POSITION F-1 IS SHOWN. F-2 IS PROVIDED WHEN SPECIFIED. CONDUIT OPENING MAY BE LOCATED IN STEPS OF 90° REGARDLESS OF THE LOCATION
4. TOLERANCES ARE SHOWN IN INCHES ONLY
5. FRAME REFERENCE: 9.250/182/184

07-3196/-

**Nidec Motor Corporation**  
St. Louis, Missouri

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ISSUED BY  
**D. CISNEROS**  
APPROVED BY  
**J. HAGENE**

IHP\_DP\_NMCA (MAR-2011) SOLIDEDGE

# NAMEPLATE DATA

CATALOG NUMBER: <input style="width: 100%;" type="text" value="D3PL9G-P"/>	NAMEPLATE PART #: <input style="width: 100%;" type="text" value="422701-004"/>
MODEL <input style="width: 100%;" type="text" value="FR 182T"/>	TYPE <input style="width: 100%;" type="text" value="DE ENCL ODP"/>
SHAFT END BRG <input style="width: 100%;" type="text" value="6206-2Z-J/C3 - QTY 1"/>	OPP END BRG <input style="width: 100%;" type="text" value="6206-2Z-J/C3 - QTY 1"/>
PH <input style="width: 100%;" type="text" value="3"/> MAX AMB <input style="width: 100%;" type="text" value="40 C"/>	ID# <input style="width: 100%;" type="text" value="(ref: Order#: 21701401, Type: SO, Line#: 100)"/>
INSUL CLASS <input style="width: 100%;" type="text" value="F"/> Asm. Pos. <input style="width: 100%;" type="text" value="F1"/>	DUTY <input style="width: 100%;" type="text" value="CONT"/>
HP <input style="width: 100%;" type="text" value="3 0.75"/> RPM <input style="width: 100%;" type="text" value="1775 885"/>	HP <input style="width: 100%;" type="text"/> RPM <input style="width: 100%;" type="text"/>
VOLTS <input style="width: 100%;" type="text" value="575"/>	VOLTS <input style="width: 100%;" type="text"/>
FL AMPS <input style="width: 100%;" type="text" value="3.8 1.6"/>	FL AMPS <input style="width: 100%;" type="text"/>
SF AMPS <input style="width: 100%;" type="text" value="4.1 1.6"/>	SF AMPS <input style="width: 100%;" type="text"/>
SF <input style="width: 100%;" type="text" value="1.15"/> DESIGN <input style="width: 100%;" type="text" value="#"/> CODE <input style="width: 100%;" type="text" value="L"/>	SF <input style="width: 100%;" type="text"/> DESIGN <input style="width: 100%;" type="text"/> CODE <input style="width: 100%;" type="text"/>
NEMA NOM EFFICIENCY <input style="width: 100%;" type="text"/> NOM PF <input style="width: 100%;" type="text"/> KiloWatt <input style="width: 100%;" type="text" value="2.24"/>	NEMA NOM EFFICIENCY <input style="width: 100%;" type="text"/> NOM PF <input style="width: 100%;" type="text"/>
GUARANTEED EFFICIENCY <input style="width: 100%;" type="text"/> MAX KVAR <input style="width: 100%;" type="text"/> HZ <input style="width: 100%;" type="text" value="60"/>	GUARANTEED EFFICIENCY <input style="width: 100%;" type="text"/> MAX KVAR <input style="width: 100%;" type="text"/> HZ <input style="width: 100%;" type="text"/>

**HAZARDOUS LOCATION DATA (IF APPLICABLE):**

DIVISION <input style="width: 100%;" type="text"/>	CLASS I <input style="width: 100%;" type="text"/>	GROUP I <input style="width: 100%;" type="text"/>
TEMP CODE <input style="width: 100%;" type="text"/>	CLASS II <input style="width: 100%;" type="text"/>	GROUP II <input style="width: 100%;" type="text"/>



**VFD DATA (IF APPLICABLE):**

VOLTS <input style="width: 100%;" type="text"/>	AMPS <input style="width: 100%;" type="text"/>
TORQUE 1 <input style="width: 100%;" type="text"/>	TORQUE 2 <input style="width: 100%;" type="text"/>
VFD LOAD TYPE 1 <input style="width: 100%;" type="text"/>	VFD LOAD TYPE 2 <input style="width: 100%;" type="text"/>
VFD HERTZ RANGE 1 <input style="width: 100%;" type="text"/>	VFD HERTZ RANGE 2 <input style="width: 100%;" type="text"/>
VFD SPEED RANGE 1 <input style="width: 100%;" type="text"/>	VFD SPEED RANGE 2 <input style="width: 100%;" type="text"/>
SERVICE FACTOR <input style="width: 100%;" type="text"/>	FL SLIP <input style="width: 100%;" type="text"/>
NO. POLES <input style="width: 100%;" type="text" value="4"/>	MAGNETIZING AMPS <input style="width: 100%;" type="text" value="2.9"/>
VECTOR MAX RPM <input style="width: 100%;" type="text"/>	Encoder PPR <input style="width: 100%;" type="text"/>
Radians / Seconds <input style="width: 100%;" type="text"/>	Encoder Volts <input style="width: 100%;" type="text"/>

**TEAO DATA (IF APPLICABLE):**

HP (AIR OVER) <input style="width: 100%;" type="text"/>	HP (AIR OVER M/S) <input style="width: 100%;" type="text"/>	RPM (AIR OVER) <input style="width: 100%;" type="text"/>	RPM (AIR OVER M/S) <input style="width: 100%;" type="text"/>
FPM AIR VELOCITY <input style="width: 100%;" type="text"/>	FPM AIR VELOCITY M/S <input style="width: 100%;" type="text"/>	FPM AIR VELOCITY SEC <input style="width: 100%;" type="text"/>	

**ADDITIONAL NAMEPLATE DATA:**

Decal / Plate	WD=416279	Customer PN	
Notes		Non Rev Ratchet	
Max Temp Rise		OPP/Upper Oil Cap	GREASE
Thermal (WDG)		SHAFT/Lower Oil Cap	GREASE
Altitude		Usable At	
Regulatory Notes		Regulatory Compliance	CC 030A
COS		Marine Duty	
Balance		Arctic Duty	
3/4 Load Eff.		Inrush Limit	
Motor Weight (LBS)	50	Direction of Rotation	
Sound Level		Special Note 1	
Vertical Thrust (LBS)		Special Note 2	
Thrust Percentage		Special Note 3	
Bearing Life		Special Note 4	
Starting Method		Special Note 5	
Number of Starts		Special Note 6	
200/208V 60Hz Max Amps		SH Max. Temp.	
190V 50 hz Max Amps		SH Voltage	
380V 50 Hz Max Amps		SH Watts	
NEMA Inertia		Load Inertia	
Sumpheater Voltage		Sumpheater Wattage	
Special Accessory Note 1		Special Accessory Note 16	
Special Accessory Note 2		Special Accessory Note 17	
Special Accessory Note 3		Special Accessory Note 18	
Special Accessory Note 4		Special Accessory Note 19	
Special Accessory Note 5		Special Accessory Note 20	
Special Accessory Note 6		Special Accessory Note 21	
Special Accessory Note 7		Special Accessory Note 22	
Special Accessory Note 8		Special Accessory Note 23	
Special Accessory Note 9		Special Accessory Note 24	
Special Accessory Note 10		Special Accessory Note 25	
Special Accessory Note 11		Special Accessory Note 26	
Special Accessory Note 12		Special Accessory Note 27	
Special Accessory Note 13		Special Accessory Note 28	
Special Accessory Note 14		Special Accessory Note 29	
Special Accessory Note 15		Special Accessory Note 30	
Heater in C/B Voltage		Heater in C/B Watts	
Zone 2 Group		Division 2 Service Factor	
Note 1		Note 2	
Note 3		Note 4	
Note 5		Note 6	
Note 7		Note 8	
Note 9		Note 10	
Note 11		Note 12	
Note 13		Note 14	
Note 15		Note 16	
Note 17		Note 18	
Note 19		Note 20	
Note 21		Note 22	

**NIDEC MOTOR CORPORATION  
ST. LOUIS, MO**

TYPICAL NAMEPLATE DATA  
ACTUAL MOTOR NAMEPLATE LAYOUT MAY VARY  
SOME FIELDS MAY BE OMITTED



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# MOTOR PERFORMANCE

MODEL NO.	CATALOG NO.	PHASE	TYPE	FRAME
NA	D3PL9G-P	3	DE	182T
ORDER NO.	21701401		LINE NO.	100
MPI:			283332	283333
HP:			3	0.75
POLES:			4	8
VOLTS:			575	575
HZ:			60	60
SERVICE FACTOR:			1.15	1.15
EFFICIENCY (%):				
	S.F.		85.7	75.9
	FULL		85.5	74
	3/4		84.7	72
	1/2		81.3	65
	1/4		70.5	49.5
POWER FACTOR (%):				
	S.F.		74	52.7
	FULL		69.7	48.5
	3/4		59.9	40
	1/2		46.1	30.7
	1/4		28.3	20.5
	NO LOAD		7.4	9.2
	LOCKED ROTOR		63.4	49.5
AMPS:				
	S.F.		4.1	1.6
	FULL		3.8	1.6
	3/4		3.3	1.5
	1/2		3	1.4
	1/4		2.8	1.4
	NO LOAD		2.9	1.5
	LOCKED ROTOR		29.9	6.3
NEMA CODE LETTER			L	K
NEMA DESIGN LETTER			#	#
FULL LOAD RPM			1775	885
NEMA NOMINAL / EFFICIENCY (%)			85.5	74
GUARANTEED EFFICIENCY (%)			82.5	70
MAX KVAR			2.5	1.3
AMBIENT (°C)			40	40
ALTITUDE (FASL)			3300	3300
SAFE STALL TIME-HOT (SEC)			7	30
SOUND PRESSURE (DBA @ 1M)			58	53
TORQUES:				
	BREAKDOWN{% F.L.}		429	288
	LOCKED ROTOR{% F.L.}		279	158
	FULL LOAD{LB-FT}		8.9	4.5

NEMA Nominal and Guaranteed Efficiencies are up to 3,300 feet above sea level and 25 ° C ambient.

The Above Data Is Typical, Sinewave Power Unless Noted Otherwise

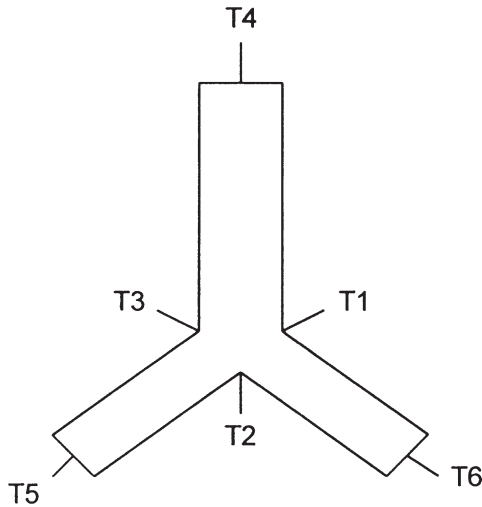
**NIDEC MOTOR CORPORATION**  
ST. LOUIS, MO



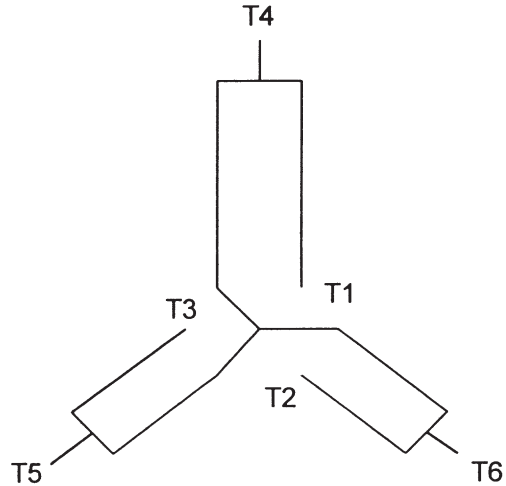


### Motor Wiring Diagram Two - Speed, One Winding, Single Voltage,

**Constant Torque**



**Variable Torque**



**Connection Diagram**

Speed	L1	L2	L3	
Low	T1	T2	T3	T4 T5 T6 Open
High	T6	T4	T5	T1 T2 T3 together

Usage - Two speed single winding. Constant torque or variable torque.  
Each lead may consist of one or more cables having the same lead number.

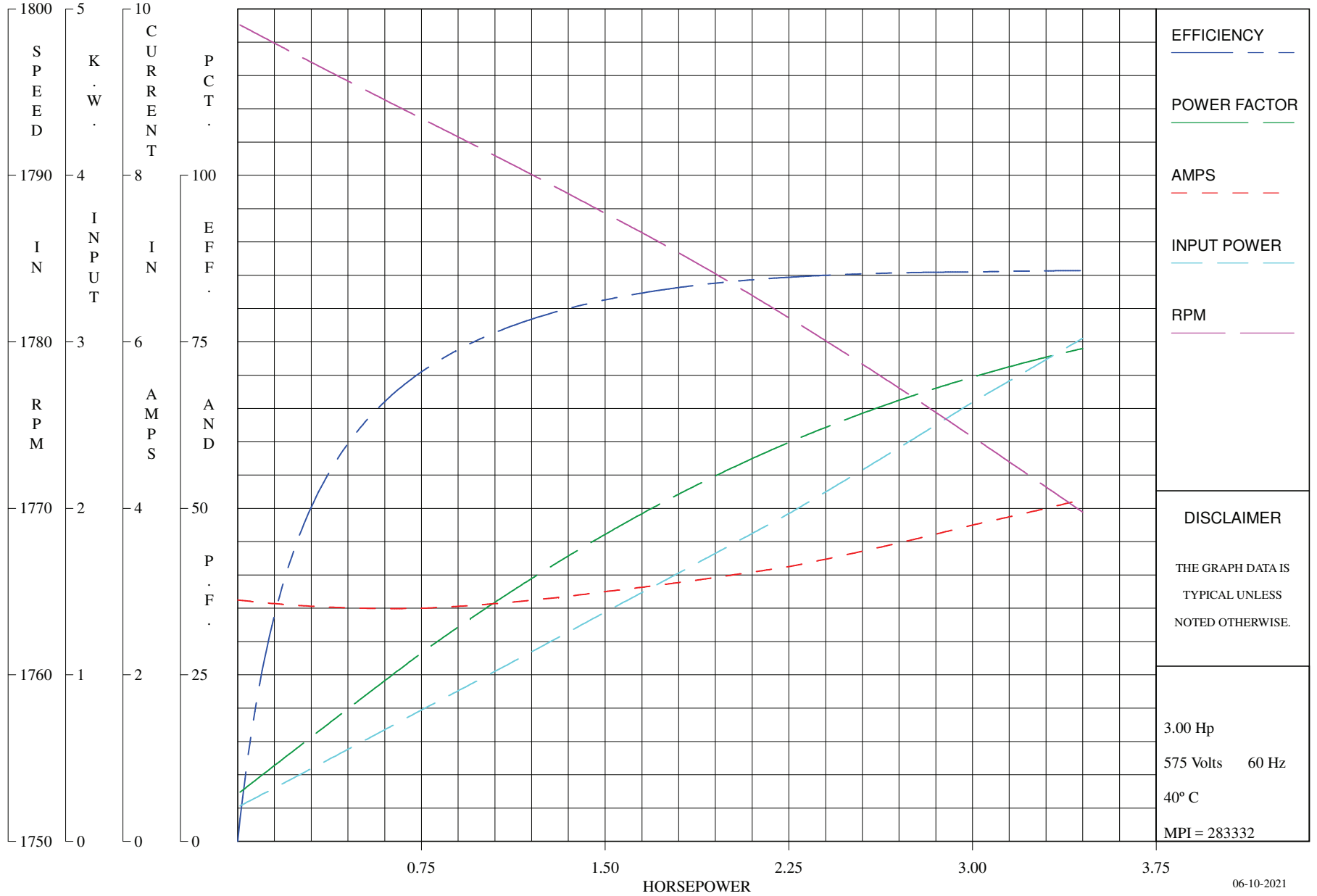
D003226

To reverse direction of rotation, interchange leads 1 & 2.

Each lead may have one or more cables comprising that lead.  
In such case, each cable will be marked with the appropriate lead number.



### Performance vs Horsepower





Torque, Current, PF vs RPM

