

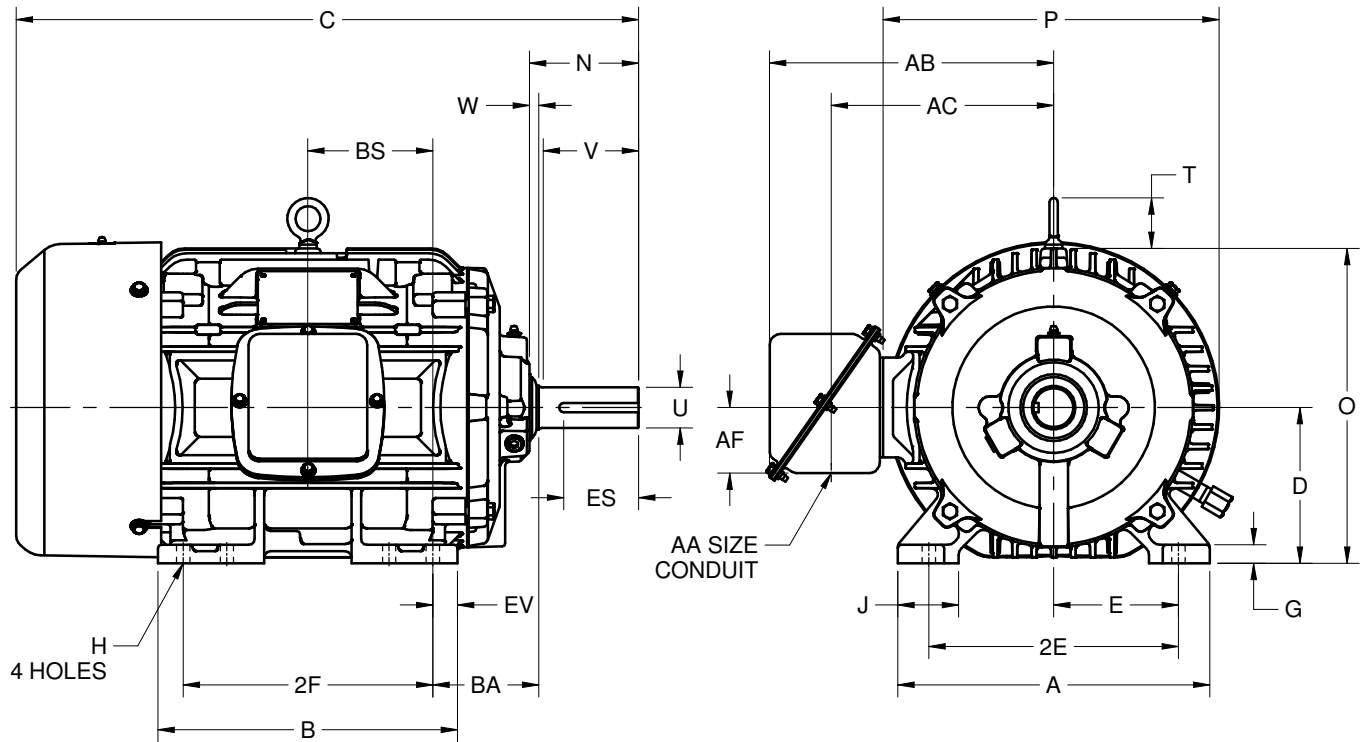
EFFECTIVE:
16-JAN-17

SUPERSEDES:
NEW

DIMENSION PRINT
WORLD MOTOR HOSTILE DUTY
FRAME: 254T, 256T
BASIC TYPE: CT

PRINT:
08-1012

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	O	P ²
IN	12.50	12.00	24.94	6.25	5.00	10.00	.75	.53	2.44	4.25	4.38	12.63	13.47
MM	318	305	633	159	127	254	19	13	62	108	111	320	342

UNITS	T	U -.001	V MIN	W	AA	AB	AC	AF	BA	BS	EV	ES MIN	SQ KEY
IN	2.03	1.625	3.75	.38	1.25	11.38	8.91	2.63	4.25	5.00	1.00	2.91	.375
MM	52	41.28	95	10		289	226	67	108	127	25	74	9.53

FRAME	UNITS	2F ±.03
254T	IN	8.25
	MM	210
256T	IN	10.00
	MM	254

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

08-1012/-

Nidec Motor Corporation
St. Louis, Missouri

INFORMATION DISCLOSED ON THIS DOCUMENT IS CONSIDERED PROPRIETARY AND SHALL NOT BE REPRODUCED OR DISCLOSED WITHOUT WRITTEN CONSENT OF NIDEC MOTOR CORPORATION



ISSUED BY
R. TIMMERMANN
APPROVED BY
M. CULLEN

IHP_DP_NMCA (MAR-2011) SOLIDEDGE

NAMEPLATE DATA

CATALOG NUMBER: <input style="width: 100%;" type="text" value="HD15P2E"/>	NAMEPLATE PART #: <input style="width: 100%;" type="text" value="422697-007"/>
MODEL <input style="width: 15%; border: 1px solid black;" type="text" value="GB53"/> <input style="width: 15%; border: 1px solid black;" type="text" value="FR"/> <input style="width: 15%; border: 1px solid black;" type="text" value="254T"/>	TYPE <input style="width: 15%; border: 1px solid black;" type="text" value="CTE"/> ENCL <input style="width: 15%; border: 1px solid black;" type="text" value="TEFC-IP54"/>
SHAFT END BRG <input style="width: 100%;" type="text" value="6309-2Z-J/C3 - QTY 1"/>	OPP END BRG <input style="width: 100%;" type="text" value="6209-2Z-J/C3 - QTY 1"/>
PH <input style="width: 10%; border: 1px solid black;" type="text" value="3"/> MAX AMB <input style="width: 15%; border: 1px solid black;" type="text" value="40 C"/>	ID# <input style="width: 100%;" type="text"/>
INSUL CLASS <input style="width: 10%; border: 1px solid black;" type="text" value="F"/> Asm. Pos. <input style="width: 30%; border: 1px solid black;" type="text" value="F1"/>	DUTY <input style="width: 100%;" type="text" value="CONT"/>
HP <input style="width: 10%; border: 1px solid black;" type="text" value="15"/> RPM <input style="width: 15%; border: 1px solid black;" type="text" value="1775"/>	HP <input style="width: 10%; border: 1px solid black;" type="text" value="15"/> RPM <input style="width: 15%; border: 1px solid black;" type="text" value="1470"/>
VOLTS <input style="width: 10%; border: 1px solid black;" type="text" value="460"/> <input style="width: 10%; border: 1px solid black;" type="text" value="230"/>	VOLTS <input style="width: 10%; border: 1px solid black;" type="text" value="400"/> <input style="width: 10%; border: 1px solid black;" type="text" value="200"/>
FL AMPS <input style="width: 10%; border: 1px solid black;" type="text" value="18.0"/> <input style="width: 10%; border: 1px solid black;" type="text" value="36.0"/>	FL AMPS <input style="width: 10%; border: 1px solid black;" type="text" value="21.0"/> <input style="width: 10%; border: 1px solid black;" type="text" value="42.0"/>
SF AMPS <input style="width: 10%; border: 1px solid black;" type="text" value="20.6"/> <input style="width: 10%; border: 1px solid black;" type="text" value="41.0"/>	SF AMPS <input style="width: 10%; border: 1px solid black;" type="text"/> <input style="width: 10%; border: 1px solid black;" type="text"/>
SF <input style="width: 10%; border: 1px solid black;" type="text" value="1.15"/> DESIGN <input style="width: 10%; border: 1px solid black;" type="text" value="B"/> CODE <input style="width: 10%; border: 1px solid black;" type="text" value="G"/>	SF <input style="width: 10%; border: 1px solid black;" type="text" value="1.00"/> DESIGN <input style="width: 10%; border: 1px solid black;" type="text" value="B"/> CODE <input style="width: 10%; border: 1px solid black;" type="text" value="F"/>
NEMA NOM EFFICIENCY <input style="width: 10%; border: 1px solid black;" type="text" value="92.4"/> NOM PF <input style="width: 10%; border: 1px solid black;" type="text" value="84.3"/> KiloWatt <input style="width: 10%; border: 1px solid black;" type="text" value="11.19"/>	NEMA NOM EFFICIENCY <input style="width: 10%; border: 1px solid black;" type="text" value="91.1"/> NOM PF <input style="width: 10%; border: 1px solid black;" type="text" value="84.5"/>
GUARANTEED EFFICIENCY <input style="width: 10%; border: 1px solid black;" type="text" value="91.0"/> MAX KVAR <input style="width: 10%; border: 1px solid black;" type="text" value="4.3"/> HZ <input style="width: 10%; border: 1px solid black;" type="text" value="60"/>	GUARANTEED EFFICIENCY <input style="width: 10%; border: 1px solid black;" type="text" value="89.5"/> MAX KVAR <input style="width: 10%; border: 1px solid black;" type="text" value="4.2"/> HZ <input style="width: 10%; border: 1px solid black;" type="text" value="50"/>

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="6.3"/>
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=137033	Customer PN	
Notes		Non Rev Ratchet	
Max Temp Rise	80C RISE/RES@FL 60HZ	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.	93.0	Inrush Limit	
Motor Weight (LBS)	250	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	CL.I GR.A B C D	Note 2	CL.II GR.F
Note 3	T3 TEMP CODE DIV 2	Note 4	AT 1.0 S.F.
Note 5	USABLE AT:	Note 6	
Note 7		Note 8	208V 40 AMPS
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



Nidec trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.

MOTOR PERFORMANCE

MODEL NO.	CATALOG NO.	PHASE	TYPE		FRAME	
GB53	HD15P2E	3	CTE		254T	
ORDER NO.		26055		LINE NO.		
MPI:		252974	252975	252976	252977	252978
HP:		15	15	15	15	15
POLES:		4	4	4	4	4
VOLTS:		460	230	208	400	200
HZ:		60	60	60	50	50
SERVICE FACTOR:		1.15	1.15	1.15	1	1
EFFICIENCY (%):						
	S.F.	91.6	91.6	90		
	FULL	92.4	92.4	91	91.1	91.1
	3/4	93	93	92.8	92.6	92.6
	1/2	92.6	92.6	93	92.9	92.9
	1/4	89.2	89.2	90.6	90.3	90.3
POWER FACTOR (%):						
	S.F.	85	85	85.3		
	FULL	84.3	84.3	85.7	84.5	84.5
	3/4	81.3	81.3	84.9	81.7	81.7
	1/2	73.2	73.2	80.2	73.7	73.7
	1/4	52.6	52.6	63.7	52.8	52.8
	NO LOAD	5.5	5.5	6.4	4.9	4.9
	LOCKED ROTOR	46.7	46.7	45.9	48.7	48.7
AMPS:						
	S.F.	20.6	41	46		
	FULL	18	36	40	21	42
	3/4	13.9	27.7	29.4	16	32
	1/2	10.3	20.6	20.7	11.8	23.6
	1/4	7.4	14.9	13.4	8.5	16.9
	NO LOAD	6.3	12.5	9.9	7.2	14.3
	LOCKED ROTOR	115.3	230.5	207	113.2	227.5
NEMA CODE LETTER		G	G	F	F	F
NEMA DESIGN LETTER		B	B	#	B	B
FULL LOAD RPM		1775	1775	1765	1470	1470
NEMA NOMINAL / EFFICIENCY (%)		92.4	92.4	91	91.1	91.1
GUARANTEED EFFICIENCY (%)		91	91	89.5	89.5	89.5
MAX KVAR		4.3	4.2	3	4.2	4.2
AMBIENT (°C)		40	40	40	40	40
ALTITUDE (FASL)		3300	3300	3300	3300	3300
SAFE STALL TIME-HOT (SEC)		30	30	30	30	30
SOUND PRESSURE (DBA @ 1M)		67	64	67	62	62
TORQUES:						
	BREAKDOWN{% F.L.}	252	252	199	225	225
	LOCKED ROTOR{% F.L.}	263	263	207	223	223
	FULL LOAD{LB-FT}	44.4	44.4	44.6	53.7	53.7

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

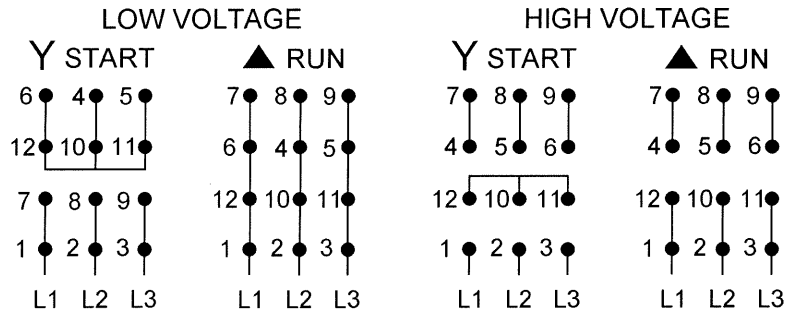
NIDEC MOTOR CORPORATION
ST. LOUIS, MO





Motor Wiring Diagram

12 Lead, Dual Voltage, Wye Start / Delta Run, Both Voltages



FULL VOLTAGE ACROSS THE LINE START AND RUN ON ▲ CONNECTIONS. ALSO SUITABLE FOR START ON Y, RUN ON ▲.

Per NEMA MG1 1998-1.76, "A Wye Start, Delta Run motor is one arranged for starting by connecting to the supply with the primary winding initially connected in wye, then reconnected in delta for running condition." This is accomplished by a special Wye-Delta starter configuration using six leads from the motor and is intended to limit the inrush current required to start the motor.

Motors designed by US Motors for Wye start, Delta Run may also be used for across the line starting using only the Delta connection. Damage will occur if the motor is operated with load for more than 30 seconds on the Wye without transition to Delta.

To reverse direction of rotation, interchange leads L1 & L2.

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