

NIDEC MOTOR CORPORATION

8050 WEST FLORISSANT AVE.
ST. LOUIS, MO 63136



DATE: 11/1/2012

P.O. NO.: CY52
Order/Line NO.: 20370 MN 100

TO:

Model Number: CY52
Catalog Number:
Corro-Duty Premium Eff. Config
CONF,MOTOR,CORRO-DUTY PRE EFF

REVISIONS:
(NONE)

ALL DOCUMENTS HEREIN ARE CONSIDERED CERTIFIED BY NIDEC MOTOR CORPORATION.
THANK YOU FOR YOUR ORDER AND THE OPPORTUNITY TO SERVE YOU.

Features:

Horsepower 00020.00 ~ KW: 14.92
Enclosure TEFC
Poles 02 ~ RPM: 3600
Frame Size 256~T
Phase/Frequency/Voltage.. 3~060~230/460 ~ Random Wound
Service Factor 1.15
Insulation Class Class "F" ~ Insulife 2000
Altitude In Feet (Max) .. 3300 Ft.(1000 M)
Ambient In Degree C (Max) +40 C
Assembly Position "F-1" Assembly Position
Efficiency Class Premium Efficiency
Application Unknown
Customer Part Number
"AK" Dimension (Inches).. NA
Temperature Rise (Sine Wave): "B" Rise @ 1.0 SF (Resist)
NEMA Design A
KVA Code Letter "J"
Starting Method Direct-On-Line Start
Duty Cycle Continuous Duty
Efficiency Value 90.2 % ~ Guaranteed
Load Inertia (lb-ft²): NEMA ~ NEMA Inertia: 20.90 ~ 1.00
Number Of Starts Per Hour: NEMA
Motor Type Code TCE
Rotor Inertia (LB-FT²) 1.46 LB-FT²
Qty. of Bearings PE (Shaft) 1
Qty. of Bearings SE (OPP) 1
Bearing Number PE (Shaft) 6309-J/C3
Bearing Number SE (OPP) 6309-J/C3

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Accessories:

Cast Iron Fan Cover
Corro-Duty
Clockwise Rotation FODE
Ground Lug In Conduit Box
Horizontal Lifting Lugs
Special Balance
Conduit Box Information: ~ Std. Oversized- Std. Const.
Conduit Opening Size (AA) .. 1.5" NPT
1 Conduit Opening ~ Bottom Of Conduit Box
Standard Leadtime: REFER TO OFFICE
Est. Weight (lbs ea): 340 ~ F.O.B.: St. Louis, MO

USE THE DATA PROVIDED BELOW TO SELECT THE APPROPRIATE DIMENSION PRINT

Horsepower	20
Pole(s)	02
Voltage(s)	460-230
Frame Size	256T
Shaft U Diameter	1.625
Outlet Box AF	2.63
Outlet Box AA	1.5

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EFFECTIVE:
28-FEB-11

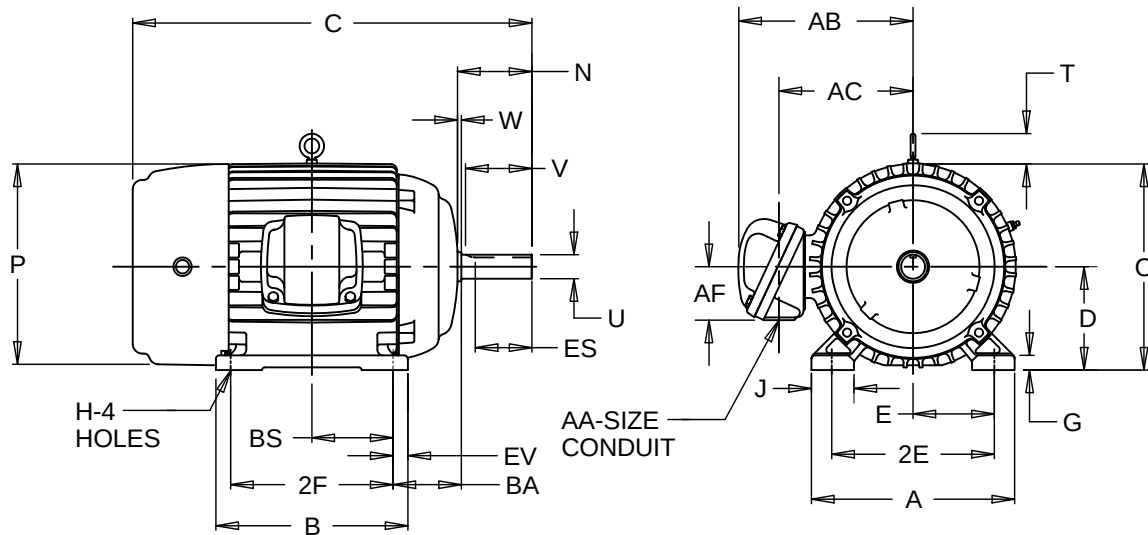
SUPERSEDES:
22-MAY-09

HORIZONTAL MOTORS

FRAME: 254, 256T
BASIC TYPE: TC,CE

PRINT:
07-2838

SHEET:
1 OF 1



ALL DIMENSIONS ARE IN INCHES AND MILLIMETERS

UNITS	A	B	C	D -.06	E	2E ±.03	G	H +.05	J	N
IN	12.13	12.00	25.00	6.25	5.00	10.00	.88	.53	2.25	4.38
MM	308	305	635	159	127	254	22	14	57	111

UNITS	O	P ²	T	U -.001	V MIN	W	AA	AB	AC	AF	BA
IN	12.91	13.31	2.03	1.625	3.75	.38	1.50 NPT	11.56	8.56	2.63	4.25
MM	328	338	52	41.28	95	10		294	217	67	108

UNITS	BS	ES MIN	EV	SQ KEY
IN	5.00	2.91	1.00	.375
MM	127	74	25	10

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

- 1: ALL ROUGH CASTING DIMENSIONS MAY VARY BY .25" DUE TO CASTING AND/OR FABRICATION VARIATIONS.
2: LARGEST MOTOR WIDTH.
3: TOLERANCES SHOWN ARE IN INCHES ONLY.

- 4: STANDARD ASSEMBLY POSITION F-1 IS SHOWN F-2 IS PROVIDED WHEN SPECIFIED. CONDUIT OPENINGS MAY BE LOCATED IN STEPS OF 90 DEGREES REGARDLESS OF LOCATION. STANDARD AS SHOWN WITH CONDUIT OPENING DOWN.

07-2838/A

Nidec Motor Corporation
St. Louis, Missouri

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ECO 46368-00

ISSUED BY
L. CUESTA
APPROVED BY
G. MATA

IHP_DP_NMCA (MAR-2011) SOLIDEDGE

NAMEPLATE DATA

CATALOG NUMBER:				NAMEPLATE PART #:		431157-000	
MODEL	CY52	FR	256T	TYPE	TCE	ENCL	TE
SHAFT END BRG		6309-J/C3 - QTY 1		OPP END BRG		6309-J/C3 - QTY 1	
PH	3	MAX AMB	40 C	ID#			
INSUL CLASS	F	Asm. Pos	F1	DUTY	CONT		
HP	20	RPM	3550	HP		RPM	
VOLTS	460	230		VOLTS			
FL AMPS	23.0	46.0		FL AMPS			
SF AMPS	26.4	53.0		SF AMPS			
SF	1.15	DESIGN	A	CODE	J		
NEMA NOM EFFICIENCY	91.7	NOM PF	88.6	KiloWatt	14.920		
GUARANTEED EFFICIENCY	90.2	MAX KVAR	4.3	HZ	60		
UL DATA (IF APPLICABLE):							
DIVISION				CLASS I			GROUP I
TEMP CODE				CLASS II			GROUP II
VFD DATA (IF APPLICABLE):							
VOLTS				TORQUE 2			
AMPS				VFD LOAD TYPE 2			
TORQUE 1				VFD HERTZ RANGE 2			
VFD LOAD TYPE 1				VFD SPEED RANGE 2			
VFD HERTZ RANGE 1							
VFD SPEED RANGE 1							
SERVICE FACTOR				FL SLIP			
NO. POLES		2		MAGNETIZING AMPS		6.3	
VECTOR MAX RPM				Encoder PPR			
Radians / Seconds		1		Encoder Volts			
TEAO DATA (IF APPLICABLE):							
HP (AIR OVER)		HP (AIR OVER M/S)		RPM (AIR OVER)		RPM (AIR OVER M/S)	
FPM AIR VELOCITY		FPM AIR VELOCITY M/S		FPM AIR VELOCITY SEC			

ADDITIONAL NAMEPLATE DATA:

Decal / Plate	WD=158802	Customer PN	
Notes		Non Rev Ratchet	
Max Temp Rise	80C RISE/RES@1.00SF	OPP/Upper Oil Cap	GREASE
Thermal (WDG)		SHAFT/Lower Oil Cap	GREASE
Altitude			
Regulatory Notes		Regulatory Compliance	
COS		Marine Duty	
Balance	0.08 IN/SEC	Arctic Duty	
3/4 Load Eff.	92.5	Inrush Limit	
Motor Weight (LBS)	340	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	

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
CY52	NA	3	TCE	256T

ORDER NO.	20370	LINE NO.	
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MPI:	134864	134865
HP:	20	20
POLES:	2	2
VOLTS:	460	230
HZ:	60	60
SERVICE FACTOR:	1.15	1.15
EFFICIENCY (%):		
S.F.	91.8	91.8
FULL	91.7	91.7
3/4	92.5	92.5
1/2	91.5	91.5
1/4	86.7	86.7
POWER FACTOR (%):		
S.F.	88.9	88.9
FULL	88.6	88.6
3/4	86.7	86.7
1/2	81.1	81.1
1/4	63.8	63.8
NO LOAD	9.8	9.8
LOCKED ROTOR	37.9	37.9
AMPS:		
S.F.	26.4	53
FULL	23	46
3/4	17.5	35
1/2	12.6	25.2
1/4	8.5	16.9
NO LOAD	6.3	12.6
LOCKED ROTOR	189.5	379
NEMA CODE LETTER	J	J
NEMA DESIGN LETTER	A	A
FULL LOAD RPM	3550	3550
NEMA NOMINAL EFFICIENCY (%)	91.7	91.7
GUARANTEED EFFICIENCY (%)	90.2	90.2
MAX KVAR	4.3	4.3
AMBIENT (°C)	40	40
ALTITUDE (FASL)	3300	3300
SAFE STALL TIME-HOT (SEC)	14	14
SOUND PRESSURE (DBA @ 1M)	68	68
TORQUES:		
BREAKDOWN{% F.L.}	319	319
LOCKED ROTOR{% F.L.}	219	219
FULL LOAD{LB-FT}	29.6	29.6

The Above Data Is Typical, Sinewave Power Unless Noted Otherwise

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ST. LOUIS, MO

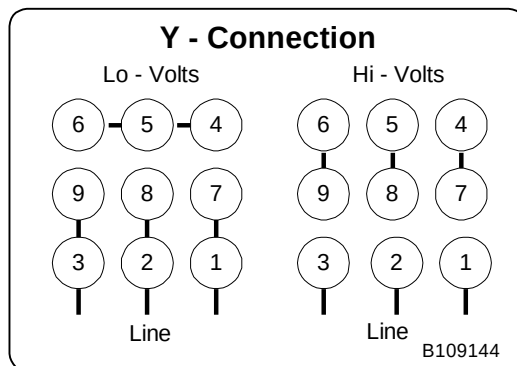
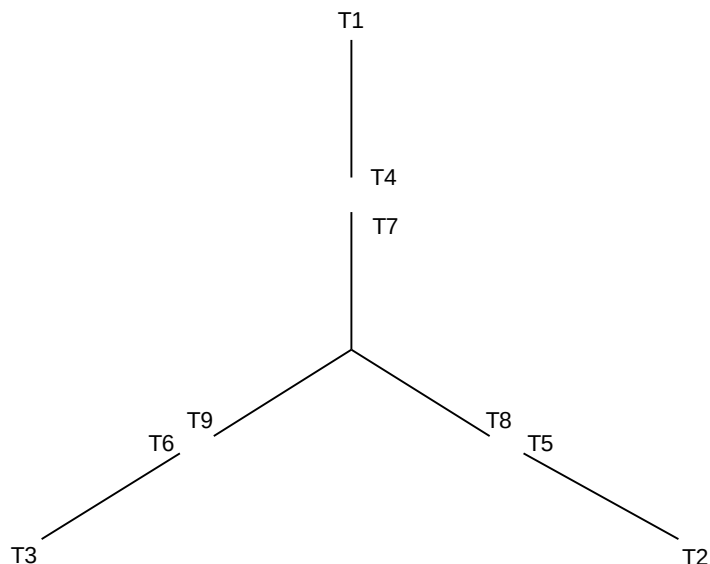


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B109144

Motor Wiring Diagram 9 Lead, Dual Voltage (WYE Conn.)



To reverse direction of rotation interchange connections L1 and 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.