

NIDEC MOTOR CORPORATION

8050 WEST FLORISSANT AVE.
ST. LOUIS, MO 63136



DATE: 4/25/2011

P.O. NO.:

Order/Line NO.: 20374 MN

TO:

Model Number: CY56

Catalog Number: NA

TEFC, PRE, AC MTR

60 HZ, 460 V, MEX. MARKET

TCE, 25 HP, 4 P, 284T

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	25
Enclosure.	TE
Poles.	04
RPM (Full Load).	1775
Motor Frame Size	284T
Phase.	3
Frequency.	60
Voltage.	460
Motor Type Code.	TCE
Rotor Inertia (LB-FT ²)	3.06 LB-FT ²
Qty. of Bearings PE (Shaft)	1
Qty. of Bearings SE (OPP)	1
Bearing Number PE (Shaft)	6310-J/C3
Bearing Number SE (OPP)	6310-J/C3

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EFFECTIVE:
05-APR-11

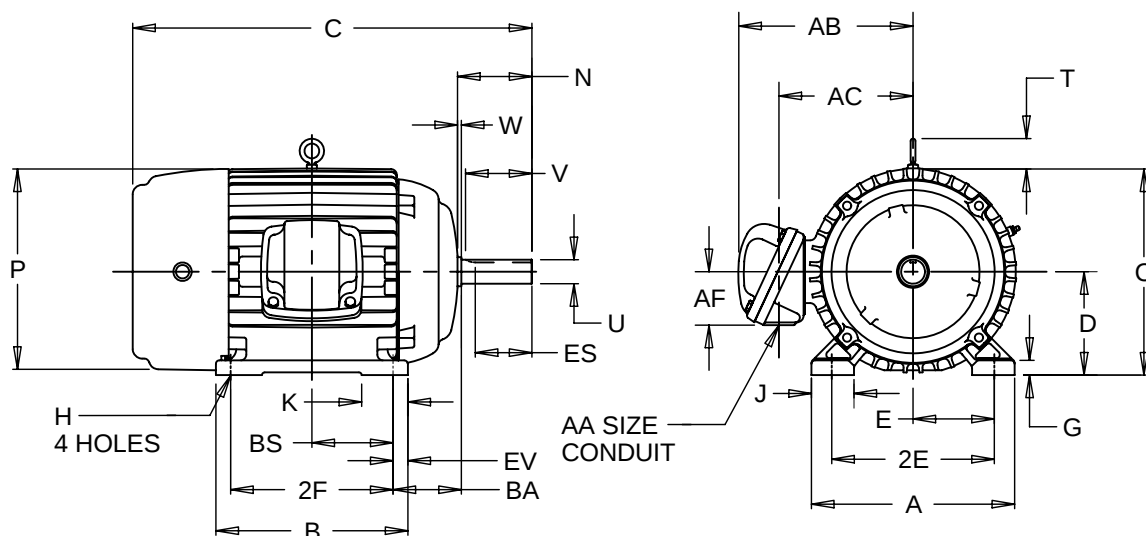
SUPERSEDES:
17-FEB-09

HORIZONTAL MOTORS

FRAME: 284, 286 T, TS
BASIC TYPE: TC

PRINT:
07-2775

SHEET:
1 OF 1



ALL DIMENSIONS ARE IN INCHES AND MILLIMETERS

UNITS	A	B	D -.06	E	2E ±.03	G	H +.05	J	O
IN	13.75	13.00	7.00	5.50	11.00	1.00	.53	2.88	14.16
MM	349	330	178	140	279	25	14	73	360

UNITS	P ²	T	AA	AB	AC	AF	BA	BS	EV	W
IN	14.31	2.03	1.50 NPT	11.63	9.19	2.63	4.75	5.50	1.00	.38
MM	364	52		295	233	67	121	140	25	10

FRAME	UNITS	C	N	U -.001	V MIN	ES MIN	SQ KEY
284, 286T	IN	27.38	5.00	1.875	4.38	3.28	.500
	MM	695	127	47.63	111	83	12.70
284, 286TS	IN	26.00	3.63	1.625	3.00	1.91	.375
	MM	660	92	41.28	76	48	9.53

FRAME	UNITS	2F ±.03
284T, TS	IN	9.50
	MM	241
286T, TS	IN	11.00
	MM	279

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.

07-2775/A ECO 46369-00

Nidec Motor Corporation
St. Louis, Missouri

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ISSUED BY
L. CUESTA
APPROVED BY
J. RANGEL

IHP_DP_NMCA (MAR-2011) SOLIDEDGE

NAMEPLATE DATA

CATALOG NUMBER:				NAMEPLATE PART #:		431157-000	
MODEL	CY56	FR	284T	TYPE	TCE	ENCL	TE
SHAFT END BRG		6310-J/C3 - QTY 1		OPP END BRG		6310-J/C3 - QTY 1	
PH	3	MAX AMB	40 C	ID#			
INSUL CLASS	F	Asm. Pos.	F1	DUTY	CONT		
HP	25	RPM	1775	HP		RPM	
VOLTS	460			VOLTS			
FL AMPS	29.6			FL AMPS			
SF AMPS	34.0			SF AMPS			
SF	1.15	DESIGN	B	CODE	G		
NEMA NOM EFFICIENCY	93.6	NOM PF	85.0	KiloWatt	18.650		
GUARANTEED EFFICIENCY	92.4	MAX KVAR	6.8	HZ	60		

UL DATA (IF APPLICABLE):

DIVISION		CLASS I		GROUP I	
TEMP CODE		CLASS II		GROUP II	

VFD DATA (IF APPLICABLE):

VOLTS		
AMPS		
TORQUE 1		
VFD LOAD TYPE 1		
VFD HERTZ RANGE 1		
VFD SPEED RANGE 1		
TORQUE 2		
VFD LOAD TYPE 2		
VFD HERTZ RANGE 2		
VFD SPEED RANGE 2		
SERVICE FACTOR		
NO. POLES	4	
VECTOR MAX RPM		
Radians / Seconds	1	
FL SLIP		
MAGNETIZING AMPS	10.0	
Encoder PPR		
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=477257	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.	94.1	Inrush Limit	
Motor Weight	380	Direction of Rotation	
Sound Level		Special Note 1	
Vertical Thrust		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
CY56	NA	3	TCE	284T

ORDER NO.	20374	LINE NO.	
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MPI:		111248
HP:		25
POLES:		4
VOLTS:		460
HZ:		60
SERVICE FACTOR:		1.15
EFFICIENCY (%):		
	S.F.	92.8
	FULL	93.6
	3/4	94.1
	1/2	93.7
	1/4	90.6
POWER FACTOR (%):		
	S.F.	85.8
	FULL	85
	3/4	81.9
	1/2	74
	1/4	53.5
	NO LOAD	5
	LOCKED ROTOR	39.5
AMPS:		
	S.F.	34
	FULL	29.6
	3/4	22.8
	1/2	16.9
	1/4	12.1
	NO LOAD	10
	LOCKED ROTOR	177
NEMACODE LETTER		G
NEMADESIGN LETTER		B
FULL LOAD RPM		1775
NEMANOMINAL EFFICIENCY (%)		93.6
GUARANTEED EFFICIENCY (%)		92.4
MAX KVAR		6.8
AMBIENT (°C)		40
ALTITUDE (FASL)		3300
SAFE STALL TIME-HOT (SEC)		30
SOUND PRESSURE (DBA @ 1M)		66
TORQUES:		
	BREAKDOWN{% F.L.}	263
	LOCKED ROTOR{% F.L.}	196
	FULL LOAD{LB-FT}	74

The Above Data Is Typical. Sinewave Power Unless Noted Otherwise

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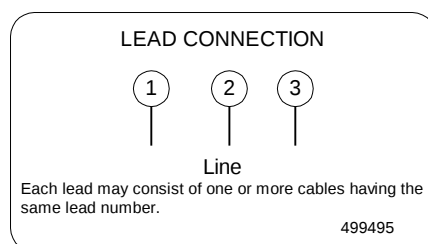
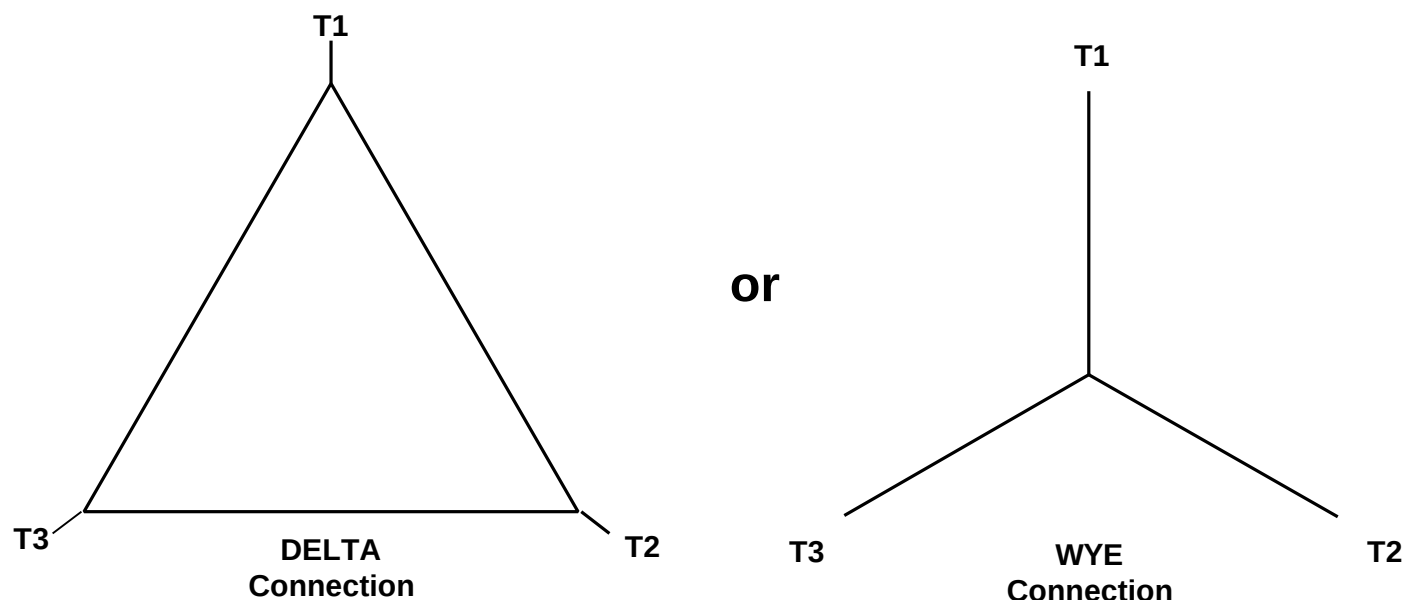


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Motor Wiring Diagram



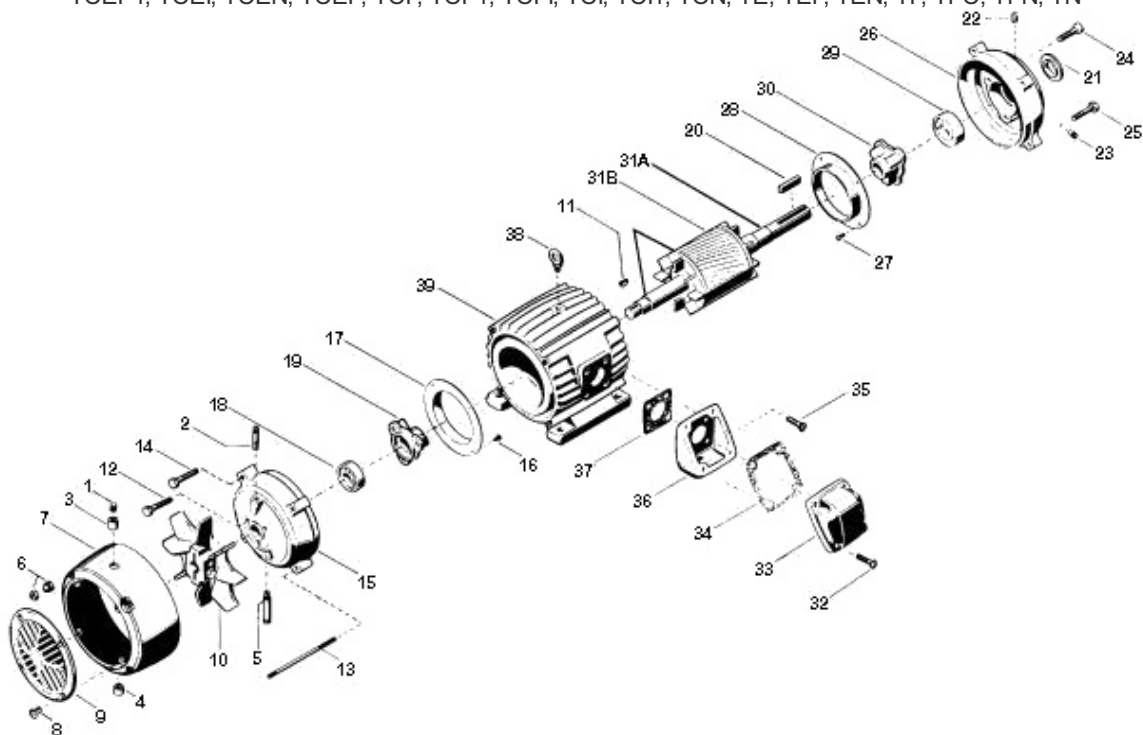
To reverse direction of rotation interchange connections L1 and L2.

Each lead may be comprised of one or more cables.
Each cable will be marked with the appropriate lead number.

RENEWAL PARTS

FRAMES 254T THRU 447T - TOTALLY ENCLOSED AND EXPLOSIONPROOF MOTORS

TYPES: CE, CE1, CE4, CEF, CT, CT1, CT4, CTC, CTE, CTE1, CTE4, CTEF, CTEF1, CTEF4, CTEI, CTEN, CTF, CTF1, CTF4, CTFI, CTFI1, CTF4, CTFN, CTI, CTI4, CTN, CTNI, EC, ECEI, FCT, FCTF, FCTF1, FCTN, FD, FDF, FDF1, FL, FLC, FLCA, FLCF, FLF, FN, FNC, FTC, FTCF, JAD, JDE, L, L1, L4, LC, LC1, LCA, LCAE, LCE, LCEF, LCEI, LCE1, , LCF, LCFI, LCI, LE, LE1, LE4, LEF, LF, LF1, LF4, LFC, LFI, LI, LN, N, NC, NCE, NCEF, NCF, NCFI, NCI, NE, NF, NN, T, T1, T4, TC, TC1, TC4, TCA, TCE, TCE1, TCE4, TCEF, TCEF4, TCEI, TCEN, TCEP, TCF, TCF1, TCFI, TCI, TCI1, TCN, TE, TEF, TEN, TF, TFC, TFN, TN



ITEM NO.	QTY	NAME OF PART
1	1	Slotted Headless Pipe Plug
2	1	Pipe Coupling
3	1	Pipe Nipple
4	1	Pipe Cap
5	1	Pipe Nipple
6	2	Cap and Jam Nut
7	1	Fan Cover Guard
8	3	Screw & Lockwasher
9	1	Grill
10	1	Vent Fan Assembly
11	1	Woodruff Key (Not used on frames 254T & 256T)
12	2	Screw
13	2	Stud & Nut
14	2	Screw (Qty 6 on frames 254T & 256T)
15	1	Bracket
16	4	Screw (Used only on frame 286T & 326T)
17	1	Air Deflector (Used only on frame 286T & 326T)
18	1	Ball Bearing
19	1	Bearing Cap
20	1	Key
21	1	Water Deflector

ITEM NO.	QTY	NAME OF PART
22	1	Slotted Headless Pipe Plug
23	1	Pipe Plug
24	2	Screw
25	4	Screw (Qty 8 on frames 286T & 326T)
26	1	Bracket (Not used on types TF)
27	4	Screw (Used only on frame 286T & 326T)
28	1	Air Deflector ((Used only on frame 286T & 326T)
29	1	Ball Bearing
30	1	Bearing Cap
31	1	Rotor Assembly (Includes items 31A & 31B)
31A	1	Motor Shaft
31B	1	Rotor Core
32	4	Screw
33	1	Outlet Box Cover
34	1	Gasket
35	4	Screw (Qty 2 on frames 254T & 256T)
36	1	Outlet Box Base
37	1	Gasket (Outlet Box Base)
38	1	Eyebolt
39	1	Wound Stator Assembly

WARNING:

Any disassembly or repair work on explosionproof motors will void the Underwriters Laboratories, Inc. label unless done by the manufacturer, or a facility approved by the Underwriters Laboratories, Inc. Refer to your nearest U.S. Electrical Motors office for assistance.

BEARINGS:

Refer to motor nameplate for the bearing numbers.

PRICES:

Parts stocking distributors: refer to USEM renewal parts numerical index. All Others: refer to your nearest USEM parts distributor.