

**NIDEC MOTOR CORPORATION**

8050 WEST FLORISSANT AVE.  
ST. LOUIS, MO 63136



**DATE:** 12/5/2016

**P.O. NO.:** DR32  
**Order/Line NO.:** 21931 MN 100

**TO:**

**Model Number:** DR32  
**Catalog Number:**  
Unimount Pre. Eff. Config.  
CONF,MOTOR,UNIMOUNT 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 ..... 00001.50 ~ KW: 1.119  
Enclosure ..... TEFC  
Poles ..... 06 ~ RPM: 1200  
Frame Size ..... 182~TC  
Phase/Frequency/Voltage.. 3~060~230/460 ~ Random Wound  
Service Factor ..... 1.25  
Insulation Class ..... Class "F" ~ Insulife 1000  
Altitude In Feet (Max) .. 3300 Ft.(1000 M)  
Ambient In Degree C (Max) +40 C  
Assembly Position ..... F1, Ftls, Flng Mnt, Shaft Horz  
Efficiency Class ..... Premium Efficiency  
Application ..... Unknown  
Customer Part Number ....  
"AK" Dimension (Inches).. 8.500  
Temperature Rise (Sine Wave): "B" Rise @ 1.0 SF (Resist)  
Starting Method ..... Direct-On-Line Start  
Duty Cycle ..... Continuous Duty  
Efficiency Value ..... 85.5 % ~ Typical  
Load Inertia (lb-ft<sup>2</sup>): NEMA ~ NEMA Inertia: 22.70 ~ 1.00  
Number Of Starts Per Hour: NEMA  
Motor Type Code ..... UTEF  
Rotor Inertia (LB-FT<sup>2</sup>) .270 LB-FT<sup>2</sup>  
Qty. of Bearings PE (Shaft) 1  
Qty. of Bearings SE (OPP) 1  
Bearing Number PE (Shaft) 6206-2Z-J/C3  
Bearing Number SE (OPP) 6205-2Z-J/C3

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

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**Accessories:**

Shaft Slinger - Pulley End  
Footless (Round Frame)

Product Family .....  
Standard Leadtime: 8-9 WEEKS  
Est. Weight (lbs ea): 60 ~ F.O.B.: Monterrey, Mexico

**USE THE DATA PROVIDED BELOW TO SELECT THE APPROPRIATE DIMENSION PRINT**

<b>Horsepower</b>	1.5
<b>Pole(s)</b>	06
<b>Voltage(s)</b>	460-230
<b>Frame Size</b>	182TC
<b>Shaft U Diameter</b>	1.125
<b>Outlet Box AF</b>	2.13
<b>Outlet Box AA</b>	0.75

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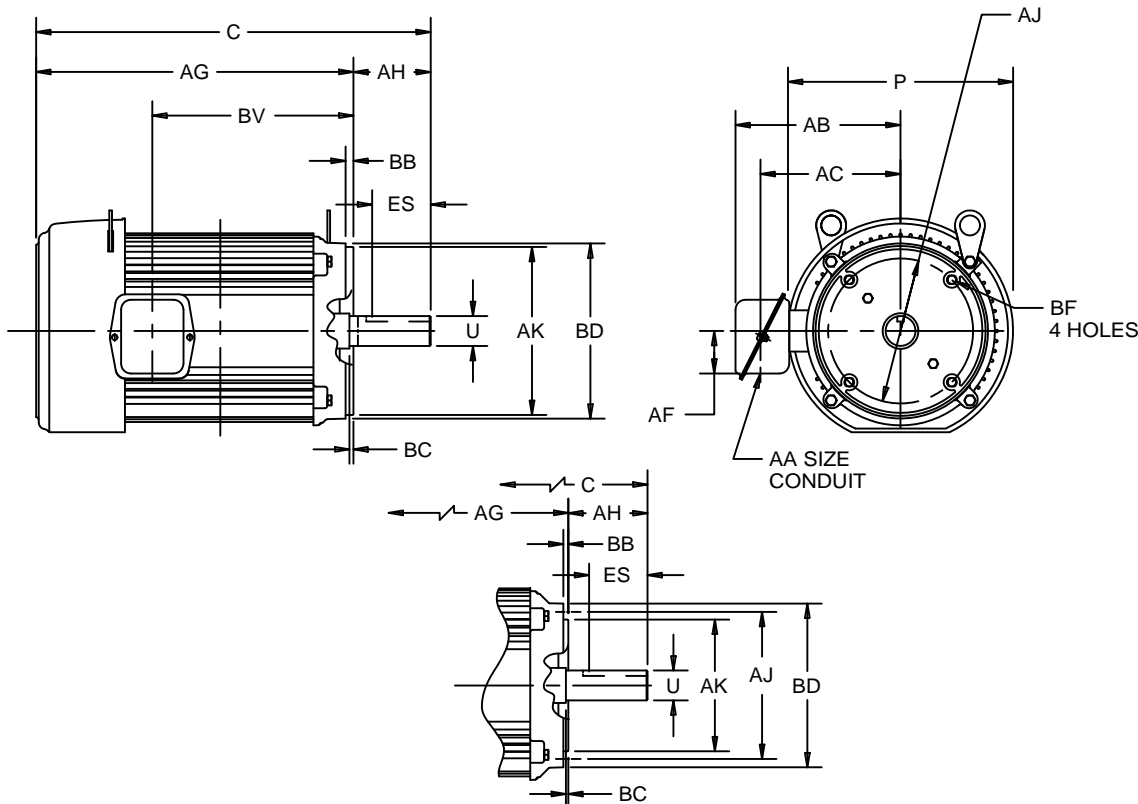
EFFECTIVE:  
15-MAY-15

SUPERSEDES:  
13-APR-11

**DIMENSION PRINT**  
TEFC - FOOTLESS WITH "C" FACE  
FRAME: 182 THRU 215TC  
BASIC TYPE: UT

PRINT:  
07-2030

SHEET:  
1 OF 1



FOR FRAMES  
182TCH AND 184TCH

ALL DIMENSIONS ARE IN INCHES AND MILLIMETERS

FRAME	UNITS	P <sup>2</sup>	T	U -.0005	AA	AB	AC	AF	AH	BC	ES MIN	SQ KEY
180	IN	9.56	.38	1.1250	.75	7.56	6.38	2.13	2.63	.13	1.78	.250
	MM	243	10	28.575		192	162	54	67	3	45	6.35
210	IN	11.25	.38	1.3750	1.00	8.41	7.16	2.13	3.13	.25	2.41	.313
	MM	286	10	34.925		214	182	54	80	6	61	7.95

FRAME	UNITS	C	AG	AJ	AK -.003	BB MIN	BD MAX	BF <sup>3</sup>	BV
182TC	IN	16.19	13.50	7.250	8.500	.25	9.00	1/2-13 X .75	8.41
	MM	411	343	184.15	215.90	6	229		214
182TCH	IN	16.19	13.50	5.875	4.500	.16	6.50	3/8-16 X .56	8.41
	MM	411	343	149.23	114.30	4	165		214
184TC	IN	16.94	14.25	7.250	8.500	.25	9.00	1/2-13 X .75	9.16
	MM	430	362	184.15	215.90	6	229		233
184TCH	IN	16.94	14.25	5.875	4.500	.16	6.50	3/8-16 X .56	9.19
	MM	430	362	149.23	114.30	4	165		233
213TC	IN	18.63	15.50	7.250	8.500	.25	9.00	1/2-13 X .75	9.88
	MM	473	394	184.15	215.90	6	229		251
215TC	IN	20.13	17.00	7.250	8.500	.25	9.00	1/2-13 X .75	11.38
	MM	511	432	184.15	215.90	6	229		289

- 1: ALL ROUGH DIMENSIONS MAY VARY BY .25" DUE TO CASTING AND/OR FABRICATION VARIATIONS.
- 2: LARGEST MOTOR WIDTH.
- 3: CONDUIT BOX MAY BE LOCATED ON EITHER SIDE. CONDUIT OPENINGS MAY BE LOCATED IN STEPS OF 90 DEGREES REGARDLESS OF LOCATION. STANDARD AS SHOWN WITH CONDUIT OPENING DOWN.
- 4: TAP SIZE AND BOLT PENETRATION ALLOWANCE.
- 5: ALL TAPPED HOLES ARE UNIFIED NATIONAL COARSE, RIGHT HAND THREAD.
- 6: TOLERANCES SHOWN ARE IN INCHES ONLY.
- 7: FRAME REFERENCE: 8.250/182/9.000/184  
9.500/213/11.000/215

TOLERANCES	
FACE RUNOUT	.004 T.I.R.
PERMISSIBLE ECCENTRICITY OF MOUNTING RABBET	.004 T.I.R.
PERMISSIBLE SHAFT RUNOUT	.002 T.I.R.

07-2030/D

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

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ISSUED BY  
**R. KING**  
APPROVED BY  
**J. O'BRIEN**

IHP\_DP\_NMCA (MAR-2011) SOLIDEDGE

# NAMEPLATE DATA

CATALOG NUMBER: _____		NAMEPLATE PART #: <span style="border: 1px solid black; padding: 2px;">417128-001</span>	
MODEL	<span style="border: 1px solid black; padding: 2px;">DR32</span>	FR	<span style="border: 1px solid black; padding: 2px;">182TC</span>
SHAFT END BRG		<span style="border: 1px solid black; padding: 2px;">6206-2Z-J/C3 - QTY 1</span>	
PH	<span style="border: 1px solid black; padding: 2px;">3</span>	MAX AMB	<span style="border: 1px solid black; padding: 2px;">40 C</span>
INSUL CLASS	<span style="border: 1px solid black; padding: 2px;">F</span>	Asm. Pos.	_____
HP	<span style="border: 1px solid black; padding: 2px;">1.5</span>	RPM	<span style="border: 1px solid black; padding: 2px;">1175</span>
VOLTS	<span style="border: 1px solid black; padding: 2px;">460</span>	<span style="border: 1px solid black; padding: 2px;">230</span>	_____
FL AMPS	<span style="border: 1px solid black; padding: 2px;">2.3</span>	<span style="border: 1px solid black; padding: 2px;">4.7</span>	_____
SF AMPS	<span style="border: 1px solid black; padding: 2px;">2.7</span>	<span style="border: 1px solid black; padding: 2px;">5.5</span>	_____
SF	<span style="border: 1px solid black; padding: 2px;">1.25</span>	DESIGN	<span style="border: 1px solid black; padding: 2px;">B</span>
NEMA NOM EFFICIENCY	<span style="border: 1px solid black; padding: 2px;">87.5</span>	NOM PF	<span style="border: 1px solid black; padding: 2px;">68.8</span>
GUARANTEED EFFICIENCY	<span style="border: 1px solid black; padding: 2px;">85.5</span>	MAX KVAR	<span style="border: 1px solid black; padding: 2px;">1.1</span>
CODE	<span style="border: 1px solid black; padding: 2px;">J</span>	KiloWatt	<span style="border: 1px solid black; padding: 2px;">1.119</span>
		HZ	<span style="border: 1px solid black; padding: 2px;">60</span>

TYPE		<span style="border: 1px solid black; padding: 2px;">UTEF</span>	ENCL	<span style="border: 1px solid black; padding: 2px;">TE</span>
OPP END BRG		<span style="border: 1px solid black; padding: 2px;">6205-2Z-J/C3 - QTY 1</span>		
ID#	_____			
DUTY	<span style="border: 1px solid black; padding: 2px;">CONT</span>			
HP	_____	RPM	_____	_____
VOLTS	_____	_____	_____	_____
FL AMPS	_____	_____	_____	_____
SF AMPS	_____	_____	_____	_____
SF	_____	DESIGN	_____	CODE
NEMA NOM EFFICIENCY	_____	NOM PF	_____	_____
GUARANTEED EFFICIENCY	_____	MAX KVAR	_____	HZ
	_____	_____	_____	_____

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

DIVISION	_____	CLASS I	_____	GROUP I	_____
TEMP CODE	_____	CLASS II	_____	GROUP II	_____

**VFD DATA (IF APPLICABLE):**

VOLTS	_____	TORQUE 1	_____	TORQUE 2	_____
AMPS	_____	VFD LOAD TYPE 1	_____	VFD LOAD TYPE 2	_____
		VFD HERTZ RANGE 1	_____	VFD HERTZ RANGE 2	_____
		VFD SPEED RANGE 1	_____	VFD SPEED RANGE 2	_____
SERVICE FACTOR	_____	FL SLIP	_____		
NO. POLES	<span style="border: 1px solid black; padding: 2px;">6</span>	MAGNETIZING AMPS	<span style="border: 1px solid black; padding: 2px;">1.6</span>		
VECTOR MAX RPM	_____	Encoder PPR	_____		
Radians / Seconds	<span style="border: 1px solid black; padding: 2px;">1</span>	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=417132	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		Arctic Duty	
3/4 Load Eff.	87.2	Inrush Limit	
Motor Weight (LBS)	60	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	

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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
DR32	NA	3	UTEF	182TC

ORDER NO.	21931	LINE NO.

MPI:	67455	67456
HP:	1.5	1.5
POLES:	6	6
VOLTS:	460	230
HZ:	60	60
SERVICE FACTOR:	1.25	1.25
EFFICIENCY (%):		
S.F.	86.9	86.9
FULL	87.5	87.5
3/4	87.2	87.2
1/2	84.9	84.9
1/4	76.3	76.3
POWER FACTOR (%):		
S.F.	73.6	73.6
FULL	68.8	68.8
3/4	60.5	60.5
1/2	47.6	47.6
1/4	29.3	29.3
NO LOAD	6.3	6.3
LOCKED ROTOR	48.7	48.7
AMPS:		
S.F.	2.7	5.5
FULL	2.3	4.7
3/4	2	4
1/2	1.7	3.5
1/4	1.6	3.1
NO LOAD	1.6	3.1
LOCKED ROTOR	14.9	29.8
NEMA CODE LETTER	J	J
NEMA DESIGN LETTER	B	B
FULL LOAD RPM	1175	1175
NEMA NOMINAL / EFFICIENCY (%)	87.5	87.5
GUARANTEED EFFICIENCY (%)	85.5	85.5
MAX KVAR	1.1	1
AMBIENT (°C)	40	40
ALTITUDE (FASL)	3300	3300
SAFE STALL TIME-HOT (SEC)	30	30
SOUND PRESSURE (DBA @ 1M)	53	53
TORQUES:		
BREAKDOWN{% F.L.}	335	335
LOCKED ROTOR{% F.L.}	205	205
FULL LOAD{LB-FT}	6.7	6.7

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

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ST. LOUIS, MO

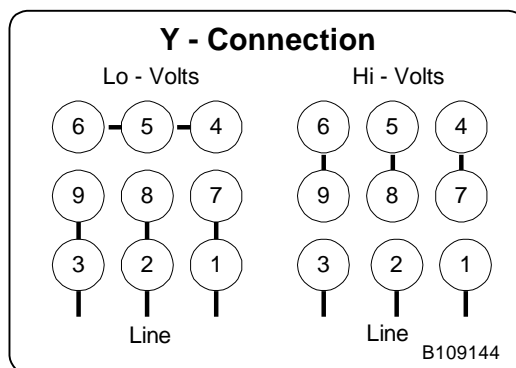


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**B109144**

### 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.