NIDEC MOTOR CORPORATION
8050 WEST FLORISSANT AVE.
ST. LOUIS, MO 63136

DATE: 10/11/2016

P.O. NO.: DT96
Order/Line NO.: 22254 MN 100

TO:

Model Number: DT96
Catalog Number: HO75V2SLG
VHS Weather Protected
CONF,MOTOR,VHS WPI

REVISIONS:
(NONE)

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

Features:

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Horsepower ..... 00075.00~00000.00 ~ KW: 55.95
Enclosure ..... WPI
Poles ..... 04~00 ~ RPM: 1800~0
Frame Size ..... 365~TP
Phase/Frequency/Voltage.. 3~060~460 ~ Random Wound
Service Factor ..... 1.15
Insulation Class ..... Class "F" ~ Insulife 2000
Altitude In Feet (Max) .. 3300 Ft.(1000 M) ~ +40 C
Efficiency Class ..... Premium Efficiency
Application ..... Vertical Centrifugal Pump
Customer Part Number ....
16.5" Base ~ Coupling Size: 1-1/4" Bore, 1/4" Key
Non-Reverse Ratchet ~ Steady Bushing Not Requested
Pricebook Thrust Value (lbs).. 5700
Customer Down Thrust (lbs) ... 5700
Customer Shutoff Thrust (lbs).
Up Thrust (lbs): ~
Inverter Duty Rating:
Load Type (Base Hz & Below) .. Variable Torque
Speed Range (Base Hz & Below). 10:1
Temperature Rise (Sine Wave): "F" Rise @ SF (Resist)
NEMA Design ..... B
Starting Method ..... PWS (Dual Volt-Low Volt Only)
Duty Cycle ..... Continuous Duty
Load Inertia (lb-ft2): NEMA ~ NEMA Inertia: 338.00 ~ 1.00
Number Of Starts Per Hour: NEMA
Motor Type Code ..... RUSI
Rotor Inertia (LB-FT²)       10.6 LB-FT²
Qty. of Bearings PE (Shaft)  1
Qty. of Bearings SE (OPP)    1
Bearing Number PE (Shaft)    6211-J
Bearing Number SE (OPP)      7220 BEP
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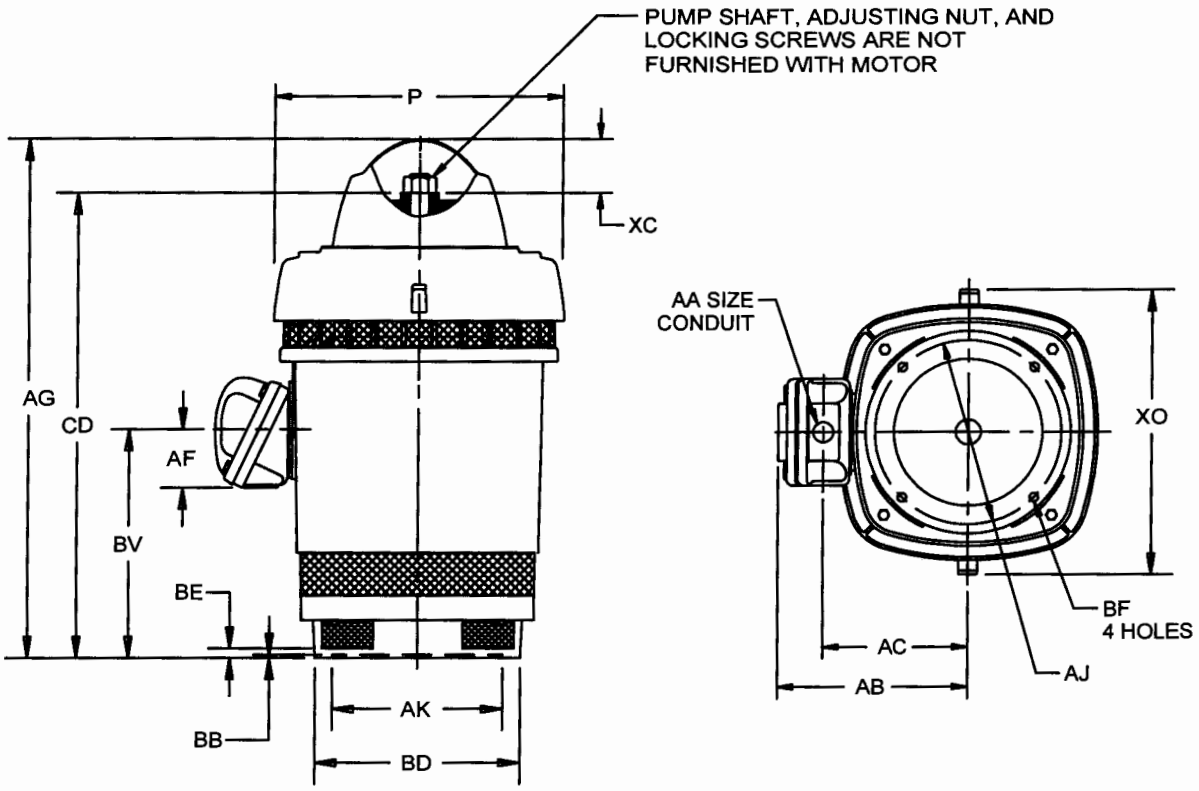
Accessories:
Counter CW Rotation FODE
Shaft Ground Ring
115 Volt Space Heaters
Special Balance
Thermostats - Normally Closed
.
Standard Leadtime: 7-8 WEEKS
Est. Weight (lbs ea): 800 ~ F.O.B.: Monterrey, Mexico

USE THE DATA PROVIDED BELOW TO SELECT THE APPROPRIATE DIMENSION PRINT

Horsepower	75
Pole(s)	04
Voltage(s)	460
Frame Size	365TP
Outlet Box AF	3.38
Outlet Box AA	3.00

EFFECTIVE: 07-MAR-11	VERTICAL MOTORS WEATHER PROTECTED TYPE I FRAME: 364, 365TP, TPA BASIC TYPE: RU, RUE, RUI, RUS	PRINT: 09-2292
SUPERSEDES: 28-AUG-01		SHEET: 1 OF 1



ALL DIMENSIONS ARE IN INCHES AND MILLIMETERS

BASIC FRAME	UNITS	P [2]	AG	BE	BV	CD	XC	XO
360	IN	19.06	36.00	.69	14.00	31.16	4.69	21.69
	MM	484	914	18	356	791	119	551

FRAME	CONDUIT BOX MATERIAL	UNITS	AA	AB	AC	AF
360	STEEL	IN	3.00	15.84	11.56	3.38
		MM	76	402	294	86
	CAST IRON	IN	3 NPT	16.63	12.25	4.63
		MM		422	311	118

FRAME	UNITS	AJ	AK	BB MIN	BD MAX	BF
364, 365TP	IN	14.750	13.500	.25	16.50	.69
	MM	374.65	342.90	6	419	18
364, 365TPA	IN	9.125	8.250	.19	12.00	.44
	MM	231.78	209.55	5	305	11

1: ALL ROUGH DIMENSIONS MAY VARY BY .25" DUE TO CASTING VARIATIONS.
2: LARGEST MOTOR WIDTH.
3: CONDUIT BOX OPENING MAY BE LOCATED IN STEPS OF 90° REGARDLESS OF LOCATION. STANDARD AS SHOWN WITH CONDUIT OPENING DOWN.
4: TOLERANCES SHOWN ARE IN INCHES ONLY.

TOLERANCES	8.250 AK	13.500 AK
"AK" DIMENSION	+.003; -.000	+.005; -.000
FACE RUNOUT	.004 T.I.R.	.007 T.I.R.
PERMISSIBLE ECCENTRICITY OF MOUNTING RABBET	.004 T.I.R.	.007 T.I.R.

09-2292/A

Nidec Motor Corporation
St. Louis, Missouri

ISSUED BY: T. MAHABARE
APPROVED BY: L. MORALES

IHP_DP_NMCA (MAR-2011) SOLIDEDGE

NAMEPLATE DATA

CATALOG NUMBER:	HO75V2SLG		NAMEPLATE PART #:	422707-005	
MODEL	DT96	FR 365TP	TYPE	RUSI	ENCL WPI
SHAFT END BRG	6211-J - QTY 1		OPP END BRG	7220 BEP - QTY 1	
PH	3	MAX AMB 40 C	ID#		
INSUL CLASS	F	Asm. Pos.	DUTY	CONT	

HP	75	RPM	1780		HP		RPM		
VOLTS	460				VOLTS				
FL AMPS	87.0				FL AMPS				
SF AMPS	100.0				SF AMPS				
SF	1.15	DESIGN	B	CODE G	SF		DESIGN		CODE
NEMA NOM EFFICIENCY	95.0	NOM PF	85.4	KiloWatt 56.0	NEMA NOM EFFICIENCY		NOM PF		
GUARANTEED EFFICIENCY	94.1	MAX KVAR		HZ 60	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	460		
AMPS	91.4		
TORQUE 1	221.1LB-FT	TORQUE 2	
VFD LOAD TYPE 1	VT/PWM	VFD LOAD TYPE 2	
VFD HERTZ RANGE 1	6-60	VFD HERTZ RANGE 2	
VFD SPEED RANGE 1	180-1800	VFD SPEED RANGE 2	
SERVICE FACTOR	1.00	FL SLIP	
NO. POLES		MAGNETIZING AMPS	
VECTOR MAX RPM		Encoder PPR	
Radians / Seconds		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=165975,CP=132839	Customer PN	
Notes		Non Rev Ratchet	NRR
Max Temp Rise		OPP/Upper Oil Cap	3 QT/2.8 L
Thermal (WDG)	OVER TEMP PROT 2	SHAFT/Lower Oil Cap	GREASE
Altitude			
Regulatory Notes		Regulatory Compliance	
COS		Marine Duty	
Balance	0.08 IN/SEC	Arctic Duty	
3/4 Load Eff.	95.3	Inrush Limit	
Motor Weight (LBS)	800	Direction of Rotation	
Sound Level		Special Note 1	
Vertical Thrust (LBS)	5700	Special Note 2	
Thrust Percentage	100% HT	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	SH VOLTS=115V
380V 50 Hz Max Amps		SH Watts	SH WATTS= 96W
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	

NIDEC MOTOR CORPORATION
ST. LOUIS, MO

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

MOTOR PERFORMANCE

MODEL NO.	CATALOG NO.	PHASE	TYPE	FRAME
DT96	HO75V2SLG	3	RUSI	365TP

ORDER NO.	22254	LINE NO.	

MPI:	192030
HP:	75
POLES:	4
VOLTS:	460
HZ:	60
SERVICE FACTOR:	1.15
EFFICIENCY (%):	
S.F.	94.2
FULL	94.5
3/4	95.3
1/2	95
1/4	92.6
POWER FACTOR (%):	
S.F.	85.7
FULL	85.4
3/4	83
1/2	75.8
1/4	55.6
NO LOAD	4.3
LOCKED ROTOR	38.8
AMPS:	
S.F.	100
FULL	87
3/4	67
1/2	49
1/4	34
NO LOAD	27.6
LOCKED ROTOR	539
NEMA CODE LETTER	G
NEMA DESIGN LETTER	B
FULL LOAD RPM	1780
NEMA NOMINAL / EFFICIENCY (%)	95
GUARANTEED EFFICIENCY (%)	94.1
MAX KVAR	18.7
AMBIENT (°C)	40
ALTITUDE (FASL)	3300
SAFE STALL TIME-HOT (SEC)	19
SOUND PRESSURE (DBA @ 1M)	65
TORQUES:	
BREAKDOWN{% F.L.}	245
LOCKED ROTOR{% F.L.}	203
FULL LOAD{LB-FT}	221.1

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

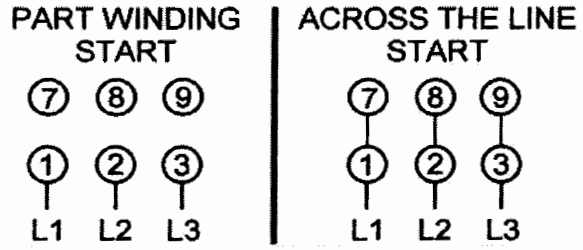
The Above Data Is Typical, Sinewave Power Unless Noted Otherwise

NIDEC MOTOR CORPORATION
ST. LOUIS, MO

165975

Motor Wiring Diagram

Single Voltage, Wye or Delta Connection Part Winding Start (PWS)
Or
Full Winding – Across the Line Start



EACH LEAD MAY CONSIST OF ONE OR MORE CABLES HAVING THE SAME LEAD NUMBER.

Per NEMA MG1 1998-1.75, "A Part-winding Start motor is one which certain specially designed circuits of each phase of the primary winding are initially connected to the supply line. The remaining circuit or circuits of each phase are connected to the supply in parallel with initially connected circuits, at a predetermined point in the starting operation." This is intended to limit the inrush current required to start the motor. NEMA MG1 1998-14.38 states that the motor may not accelerate to full speed in part-winding and may be noisier than when on full winding.

Motors designed by US Motors for Part-winding Start also be used for across the line starting using only the full winding connection. Damage will occur if the motor is operated with load for more than 2 seconds on Part-winding without transition to full winding.

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.

Connection Plate: 165975
Connection Decal: 377836(OBS), 416281

Revised: 09/08/11

NIDEC MOTOR CORPORATION
ST. LOUIS, MISSOURI

SPECIAL INFORMATION REGARDING PART WINDING STARTING

This motor is not designed to fully accelerate when started with the part winding start connection shown on the motor connection diagram. In order to avoid damaging the motor when it is started with the part winding start connection, set timers so that the motor starter switches the motor connection from start to run within two seconds from the time that the motor is initially energized. The motor is not expected to fully accelerate before the motor connection is switched to run, but the momentary operation on the start connection should allow time for automatic voltage regulators on the power system to compensate for voltage dip resulting from the high current draw of the motor during acceleration. Thus, voltage dip in the power system will be minimized through proper use of the part winding start connection. Once the motor has been switched over to the run connection, it will finish accelerating up to full speed.

During the time that the motor is operated on the part winding start connection, it is expected that the motor may be noisier than when operated on the run connection and it is also expected that the line amp unbalance between phases may be approximately 100% to 150%. This is due to the adverse effect of harmonics that result from the unbalanced magnetic circuit on the part winding start connection.

For further information regarding characteristics of polyphase induction motors when operated on a part winding start connection, refer to NEMA Publication MG 1-1998 Part 14.38.