



**NEK**

*Krško Nuclear Power Plant*  
Vrbina 12  
8270 Krško



## **TECHNICAL SPECIFICATION**

### **Replacement Motor for CIAPCS01, CIAPCS02 Pump**

#### **Motor Data and Curves**

#### **KRŠKO NUCLEAR POWER PLANT**

#### **NUCLEAR SAFETY RELATED**

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**INDUCTION MOTOR DATA SHEET**  
WESTINGHOUSE FORM 54082

1	PROJECT	KRK	S.O. NO.	76-F-66288	G.O. NO.	SY-44952
2	FURNISHED BY		DATE	3/1/77	BY	AFM
3	MARK OR ITEM NO.	KRK-CIAPCS-01-02				
4	PURCHASER'S REQUIREMENTS			DATA FURNISHED BY SELLER		
5	SERVICE	Containment Spray	MAKE	Westinghouse		
6	TYPE	Squirrel Cage Induction	FRAME NO.	5008-H		
7	NO. OF UNITS	2	HORSEPOWER	300		
8	MOUNTING	Horizontal	SERVICE FACTOR	1.15		
9	ELEC. CHARACTERISTICS	380 V. 3 PH 50 CY	FULL LOAD RPM	2958		
10	SYNCH. SPEED, RPM	3000	FULL LOAD AMP	394		
11	HORSEPOWER	300	LOCKED ROTOR AMP	2337		
12	SERVICE FACTOR	1.15	STARTING TORQUE, % F.L.	115		
13	ENCLOSURE	D.P.	PULL-OUT TORQUE, % F.L.	257		
14	INSULATION CLASS	B	EFF.-FULL LOAD, %	93.5		
15	INSULATION TREATMENT	Thermalastic Epoxy	EFF.-3/4 LOAD, %	93.7		
16	AMBIENT TEMP - C	500	EFF.-1/2 LOAD, %	93.1		
17	STATOR TEMP RISE - C	800	P.F.-FULL LOAD, %	92.4		
18	BEARING TYPE	Split Sleeve	P.F.-3/4 LOAD, %	92.0		
19	BEARING TEMP RELAY		P.F.-1/2 LOAD, %	89.1		
20	BEARING THERMOCOUPLE		P.F.-LOCKED ROTOR	27.1		
21	HALF COUPL. OR SHEAVE MTD. BY		SPACE HTRS., TOTAL WATTS	380 Volts 202 Watts		
22	ROTATION *	CW	RADIAL BEARING - TYPE	Split Sleeve		
23	WK 2 OF DRIVEN EQUIP.		THRUST BEARING - TYPE	-		
24	BRKWY. TORQ. DRVN. EQUIP.		BEARING SERVICE - HR.	-		
25	OVERSIZE COND. BOX	Yes	NORMAL BRG. OPER. TEMP - C	850		
26	COND. BOX LOCATION *		NET WEIGHT - LB.	Approx. 2350 pounds		
27	SPACE HEATERS, VOLTAGE, PHASE	380 V 1 PH 50 CY	OIL COOL. SYS. REQ'D	-		
28	SPLIT END BELLS		BRG. OIL PRESS. RANGE, PSI	-		
29	TERMINAL LUGS, TYPE		BRG. OIL REQ'D EA. BRG. GPM	-		
30	STATOR HIGH TEMP DEVICE		NAME PLATE CODE LETTER	F		
31	ADJUSTABLE SLIDE RAILS		PERMISSIBLE STARTS PER HR:			
32	SOLEPLATES		MOTOR AT AMBIENT TEMP	2		
33	PROJECT ELEV., FT.	Below 3300	MOTOR AT RATED TOTAL TEMP	1		
34	SHAFT (HOLLOW, SOLID)		TYPE SEALED INSUL. SYS.	Thermalastic Epoxy		
35	COUPLING (SELF-RELEASE)		DESCRIPTION OF INSUL. SYS.	-		
36	SOLID, NONREVERSING					
37	ADJUSTABLE, FLEXIBLE		Speed Torque Curve	664665		
38	VERT. MAX DOWNTHRUST		Time Current Curve	664666		
39	VERT. MAX UP THRUST					
40	VERT. MIN UP THRUST					
41	VERT. MIN DOWN THRUST					
42	(WITH MOTOR RUNNING)					
43	SIDE THRUST					
44	MAX REVERSE SPEED					
45	DRAIN PLUG AND VENT					
46	AIR INTAKE SCREENS	Yes				
47						
48						
49						
50						
51						
52	REMARKS:		REMARKS:			
53	ALL PERFORMANCE DATA BASED ON NORMAL RATED		ALL PERFORMANCE DATA BASED ON NORMAL RATED			
54	VOLTAGE AND FREQUENCY		VOLTAGE AND FREQUENCY			
55	ITEMS 34-44 APPLY TO VERTICAL MOTORS ONLY		INDICATE IF DATA IS ESTIMATED			
56						
57						
58						
59						
60	* VIEWED FROM END OPPOSITE COUPLING END					

**DATA IS CALCULATED!**

NOTE: All of this data is calculated and not guaranteed.

76-F-60748



LACI-2 - Westinghouse Motor Identification

G.O. SY-44952 I.B. S.O. 76-F-60748

Customer Goulds Pumps, Inc.

Motor S.O. 76-F-66288

Application Containment Spray Pumps

A.C. Motor Squirrel Cage

Data:

Frame 5008-H Type LLD NEMA Design B

Rating:

300 HP 380 Volts 394 Amperes  
2958 RPM 3 Phase 50 Hertz

Locked Code Letter F

Characteristics:

Enclosure D.P.

Duty Continuous

Rotation CW

Ambient Temperature 50°C

Temperature Rise 80°

Service Factor 1.15

Class of Insulation B Thermalastic Epoxy

Drive Coupled

Bearings Split Sleeve

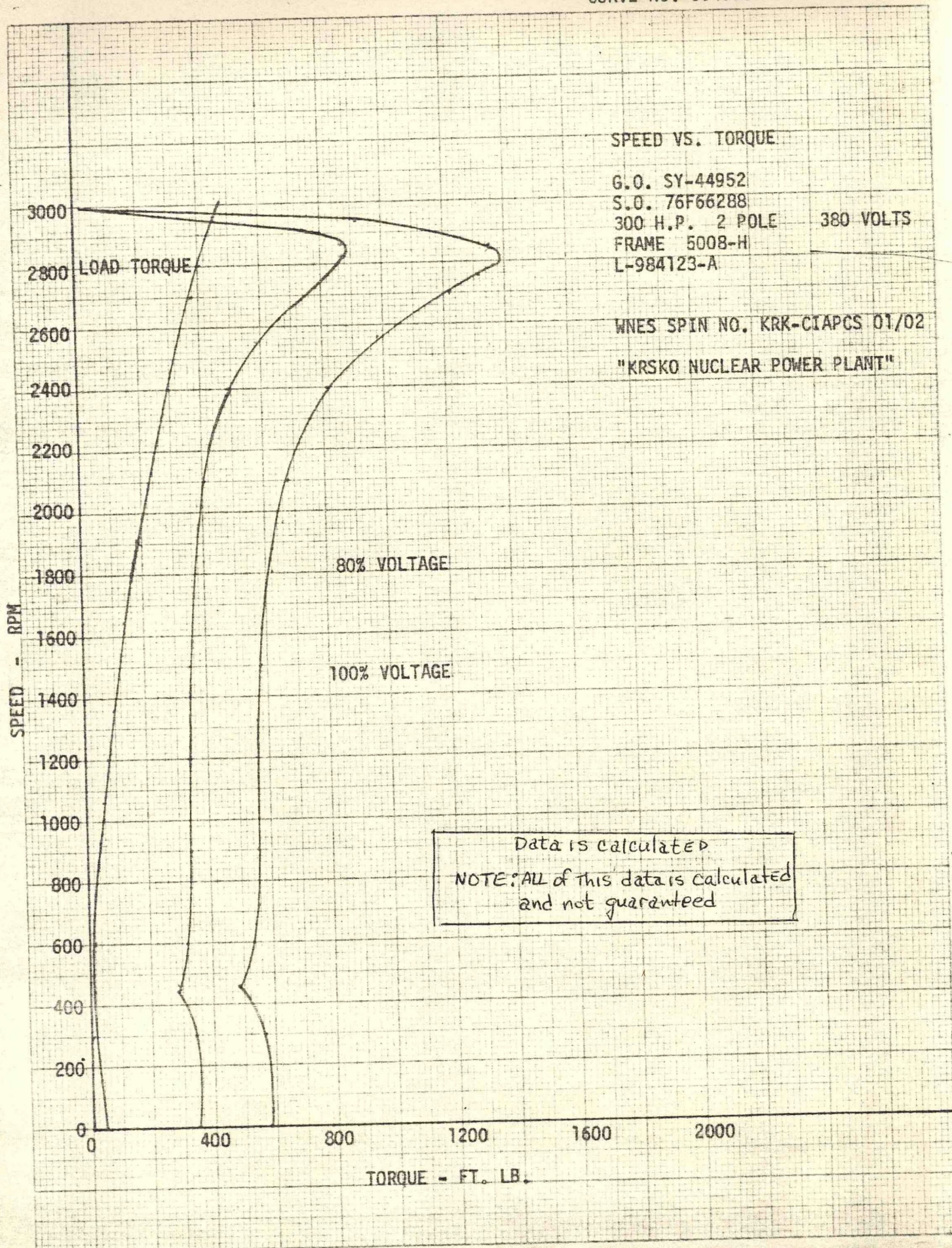
Lubrication Oil

Mounting Horizontal

Maintenance Instructions I.L. 3100-D1

Outline Drawing 9505D24



CURVE NO.  
CURVE NO. 664665



CURVE #664666

TIME VS. CURRENT

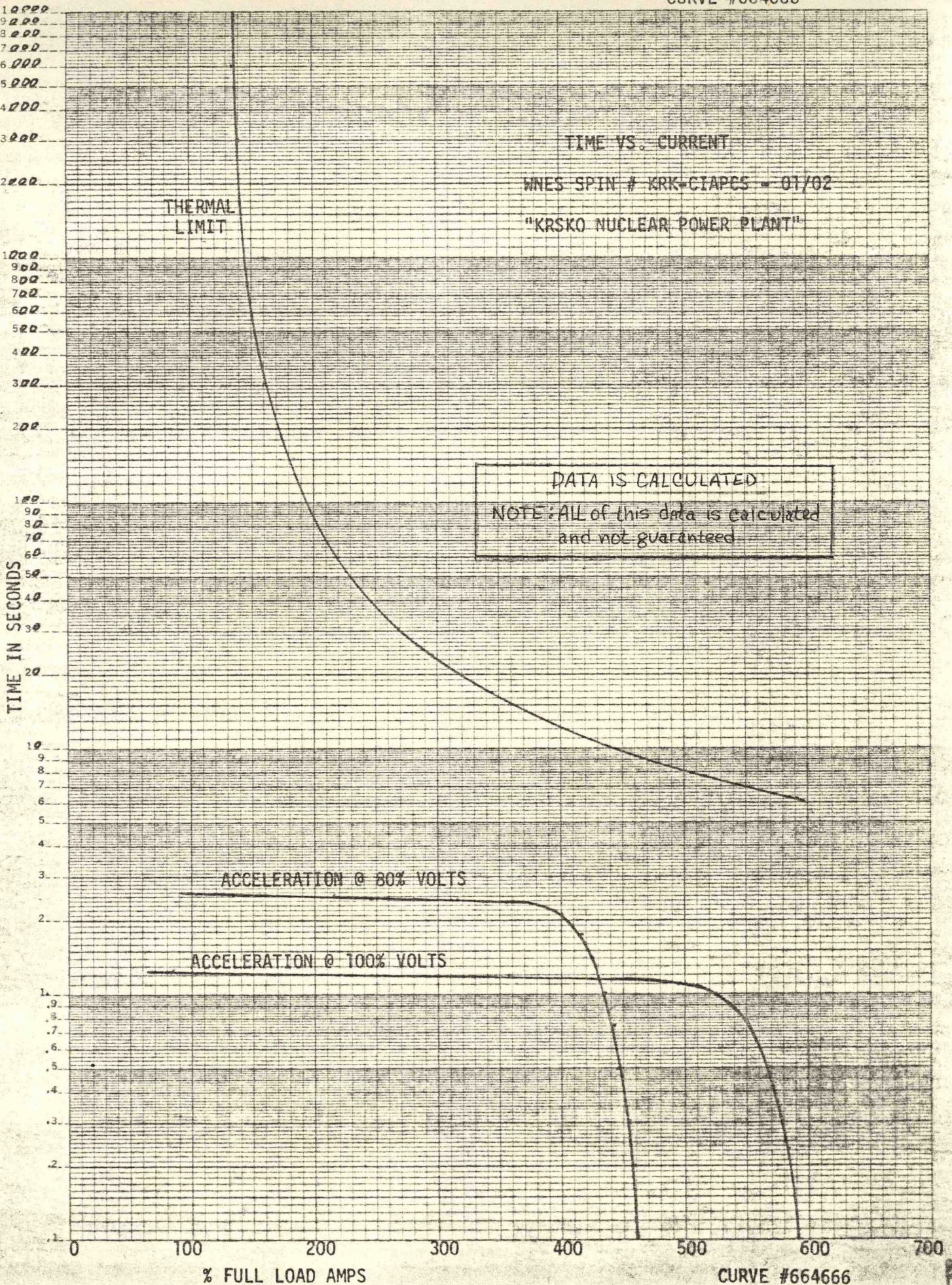
WNES SPIN # KRX-CIAPCS - 01/02

"KRSKO NUCLEAR POWER PLANT"

THERMAL  
LIMIT

DATA IS CALCULATED

NOTE: ALL of this data is calculated  
and not guaranteed



CURVE #664666

46 6212

KE  
SEMI-LOGARITHMIC 5 CYCLES X 70 DIVISIONS  
KEUFFEL & ESSER CO. MADE IN U.S.A.



c-25329



**GOULDS PUMPS, INC.**

ENGINEERED PRODUCTS DIV.

SENECA FALLS, N.Y. 13148

MODEL 3735L SIZE 4X6-13  
 AVER. R.P.M. 3560 DATE 11/18/77  
 IMPELLER DIA. 12 3/16"

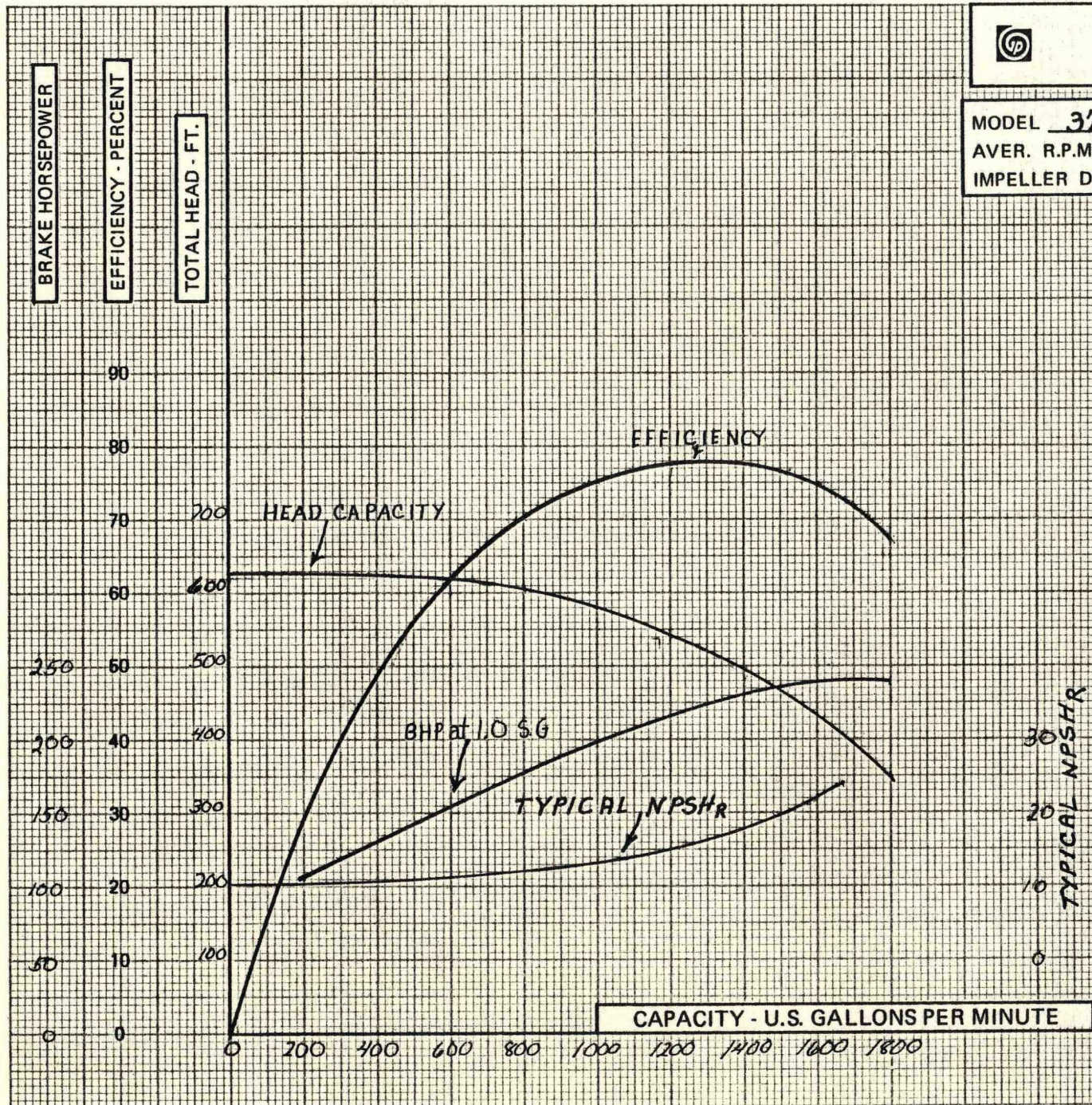
APPROXIMATE  
 CHARACTERISTIC CURVE  
 CENTRIFUGAL PUMP

NOTE - We Guarantee ONLY the RATING  
 and GENERAL SHAPE of these curves.

FOR: N240B516-1-2

WESTINGHOUSE ELECTRIC CORP.

546-CAG-225627-BE  
KRK-CIAPCE-01-02  
CONTAINMENT SPRAY PUMPS



M. W. Wager 11-17-77



# PUMP SPEED - TORQUE CURVE

PUMP MODEL 3735L

IMPELLER DIAMETER 12 $\frac{1}{2}$

PUMP SIZE 4X6-13

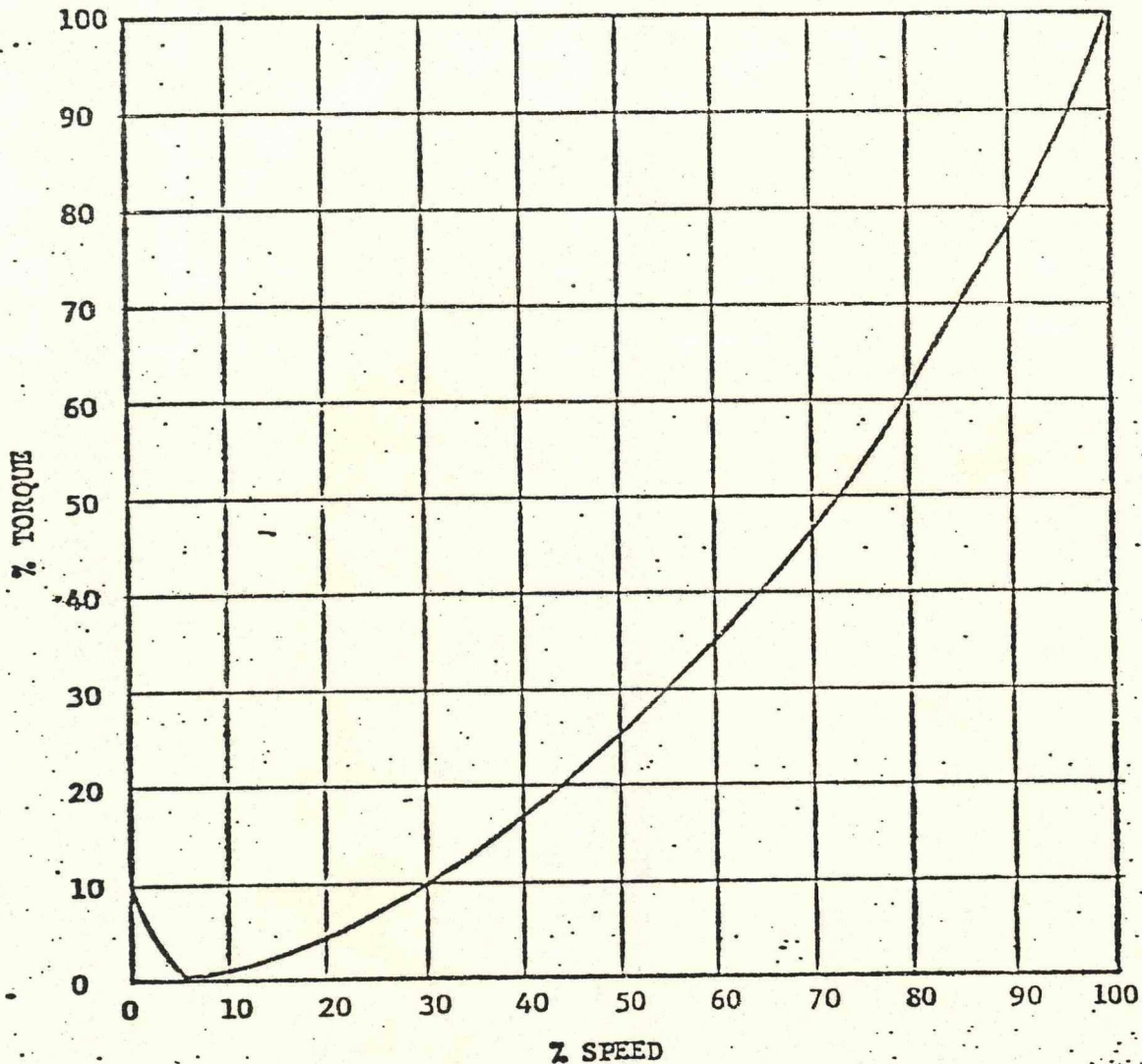
IMPELLER DRAWING 101-593

PUMP W<sup>2</sup> 3.85

LB.FT.<sup>2</sup>

IMPELLER PATTERN 54668

$$100\% \text{ TORQUE} = \frac{\text{H.P.} \times 5250}{\text{RPM}}$$



	CLOSED DISCHARGE	DESIGN POINT *	RUNOUT *
100% TORQUE-FT.LB	169.6	314.8	350.8
100% SPEED-RPM	3560	3560	3560

\* BASED ON ALL FRICTION

P.O. 546-CAG-225627-BE  
 KRK-CONTAINMENT Spray Pumps  
 KRK-CIAPCS-01-02  
 GOULDS F.D. N240516



# Westinghouse



Life-Line D

Type LAC Induction Motor

#P	300	MODEL	HSDP	FRAME	5008H
POLES	2	3 PHASE	50 CPS	VOLTS	380
F.L.A.MPS	394	LOCKED KVA CODE	F	INS. CLASS	B
RPM	2958	AMB.	50°C	TIME CONT.	80°C RISE
AT	1.15	SERVICE FACTOR	CAUTION: BEFORE INSTALLING OR OPERATING READ INSTRUCTIONS		
VOLTS		AMPS			
SER. NO.	2	SPIN	KRK-CIAPCS-02		
STYLE	76F66288	SERIAL	2S-78	USER'S NO.	

Westinghouse Electric Corporation

199P127H01

MADE IN U.S.A.

## CAUTION

With rated voltage & frequency—within NEMA limits—at motor terminals and with connected load inertia not exceeding value shown below, the following starting duty should not be exceeded:

LOAD INERTIA AT MOTOR SHAFT 15 LB.FT.<sup>2</sup>  
MOTOR COLD 2 CONSECUTIVE STARTS  
MOTOR AT OPERATING TEMP. 1 CONSECUTIVE STARTS

SUBSEQUENT STARTS WITH MOTOR RUNNING  
BETWEEN STARTS 15 MINUTES APART  
SUBSEQUENT STARTS WITH MOTOR STANDING  
BETWEEN STARTS 45 MINUTES APART

102P495H01A