

PUMP PERFORMANCE TEST REPORT AS PER IS 8034 : 2002

Rated Voltage : 220 Volts
 Motor Rating : 0.75 kw
 Model : PTB108
 Max Current : 6.5 A

No. of Stage : 8
 Arm Length : 0.13 m
 O.A. Efficiency : 22.2 %

Date : 10/01/2017
 Nominal Duty Head : 3.2 m
 Discharge At Duty Head : 1.0 LPS
 Operating Head Range : 24 to 36 m

Sr. No. of Pump Set	General Construction	Earthing Connection	Balancing of Rotor	Terminal Marking	Hydro Static Test at 1.5 Times of Rated Pressure	I.R. Test before & after H.V. Test (Min. 5 MΩ)	H.V. Test at 1.5 KV for 30 sec.	No Load Test at Rated Voltage			Locked Rotor Reading at Rated Voltage			One Per Day			One Out of 10 motors		One per Week				
								Frequency (Hz)	Current (A)	Input Power (W)	Speed (RPM)	Voltage (V)	Current (A)	Input Power (kW)	Max. Out side Diameter of pump set (Max. 98mm)	Shaft Extension Run Out (Max. 35μm)	Concentricity of Mounting Spigot to Shaft (Max. 80μm)	Perpendicularity of Mounting Face of Shaft (Max. 80μm)		Leakage Current (Max. 50mA)	Cooling Media Temp. (°C)	Resistance (Ω)	Finish of Bearing / surface finish of shaft or protective sleeve (Max. 0.75μmRa)
9A019	✓	✓	✓	✓	✓	✓	✓	50.0	3.34	660	2974	174	7.0	0.75	96.6	20	20	30	0.8	16.8	5.84	—	
020	✓	✓	✓	✓	✓	✓	✓	50.0	3.35	660	2972	174	7.0	0.75									
021	✓	✓	✓	✓	✓	✓	✓	49.9	3.38	670	2970	174	7.0	0.76									
022	✓	✓	✓	✓	✓	✓	✓	50.0	3.32	650	2973	174	7.0	0.75									
023	✓	✓	✓	✓	✓	✓	✓	49.9	3.35	660	2970	173	7.1	0.76									
024	✓	✓	✓	✓	✓	✓	✓	49.9	3.36	660	2968	172	7.2	0.77									
025	✓	✓	✓	✓	✓	✓	✓	49.9	3.34	650	2969	173	7.1	0.76									
026	✓	✓	✓	✓	✓	✓	✓	49.9	3.36	660	2966	172	7.2	0.77									
027	✓	✓	✓	✓	✓	✓	✓	49.9	3.35	660	2968	172	7.2	0.77									
028	✓	✓	✓	✓	✓	✓	✓	49.9	3.36	660	2967	171	7.3	0.78									

Tested By

PUMP PERFORMANCE TEST REPORT AS PER IS 8034 : 2002

Rated Voltage : 220 Volts
 Motor Rating : 1.1 kw
 Model : P270S115
 Max Current : 10.0 A

No. of Stage : 15
 Arm Length : 0.9 m
 O.A. Efficiency : 26.75 %

Date : 18/01/2017
 Nominal Duty Head : 6.0 m
 Discharge At Duty Head : 1.0 LPS
 Operating Head Range : 4.5 to 6.5 m

Sr. No. of Pump Set	General Construction	Earthing Connection	Balancing of Rotor	Terminal Marking	Hydro Static Test at 1.5 Times of Rated Pressure	I.R. Test before & after H.V. Test (Min. 5 MΩ)	H.V. Test at 1.5 KV for 30 sec.	No Load Test at Rated Voltage			Locked Rotor Reading at Rated Voltage			One Per Day			One Out of 10 motors		One per Week				
								Frequency (Hz)	Current (A)	Input Power (W)	Speed (RPM)	Voltage (V)	Current (A)	Input Power (KW)	Max. Out side Diameter of pump set (Max. 98mm)	Shaft Extension Run Out (Max. 35μm)	Concentricity of Mounting Spigot to Shaft (Max. 80μm)	Perpendicularity of Mounting Face of Shaft (Max. 80μm)		Leakage Current (Max. 50mA)	Cooling Media Temp. (°C)	Resistance (Ω)	Finish of Bearing / surface finish of shaft or protective sleeve (Max. 0.75μmRa)
QA039	→	→	→	→	→	→	→	50.1	4.30	850	2976	182	11.8	1.76	96.5	20	20	40	0.1	17.3	265	Satisfactory	
040	→	→	→	→	→	→	→	50.1	4.26	840	2978	182	11.8	1.76									
041	→	→	→	→	→	→	→	50.1	4.29	850	2935	181	11.9	1.77									
042	→	→	→	→	→	→	→	50.0	4.26	840	2973	182	11.8	1.76									
043	→	→	→	→	→	→	→	50.1	4.28	850	2976	181	11.9	1.77									
044	→	→	→	→	→	→	→	50.0	4.22	840	2972	181	12.0	1.77									
045	→	→	→	→	→	→	→	50.0	4.26	850	2974	180	12.1	1.78									
046	→	→	→	→	→	→	→	50.0	4.24	840	2973	181	12.0	1.77									
047	→	→	→	→	→	→	→	50.0	4.28	850	2972	182	11.9	1.76									
048	→	→	→	→	→	→	→	50.0	4.25	840	2972	181	12.0	1.77									

Tested By : *[Signature]*

PUMP PERFORMANCE TEST REPORT AS PER IS 8034 : 2002

Rated Voltage : 220 Volts
 Motor Rating : 1.1 kw
 Model : P610412
 Max Current : 9.5 A

No. of Stage : 12
 Arm Length : 0.3 m
 O.A. Efficiency : 77.5 %

Date : 18/02/2017
 Nominal Duty Head : 4.8 m
 Discharge At Duty Head : 1.0 LPS
 Operating Head Range : 3.6 to 5.3 m

Sr. No. of Pump Set	General Construction	Earthing Connection	Balancing of Rotor	Terminal Marking	Hydro Static Test at 1.5 Times of Rated Pressure	I.R. Test before & after H.V. Test (Min. 5 MΩ)	H.V. Test at 1.5 KV for 30 sec.	No Load Test at Rated Voltage			Locked Rotor Reading at Rated Voltage			One Per Day			One Out of 10 motors		One per Week				
								Frequency (Hz)	Current (A)	Input Power (W)	Speed (RPM)	Voltage (V)	Current (A)	Input Power (KW)	Max. Out side Diameter of pump set (Max. 98mm)	Shaft Extension Run Out (Max. 35μm)	Concentricity of Mounting Spigot to Shaft (Max. 80μm)	Perpendicularity of Mounting Face of Shaft (Max. 80μm)		Leakage Current (Max. 50mA)	Cooling Media Temp. (°C)	Resistance (Ω)	Measurement of Stator Resistance
SB110	Satisfy	Satisfy	Satisfy	Satisfy	OK	5100 mΩ	OK	49.9	4.16	835	2966	148	10.5	1.13	96.8	20	20	40	0.2	24.3	2.72	Satisfactory	
111	"	"	"	"	"	"	"	48.9	4.12	832	2867	147	10.6	1.14									

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18/2

Tested By 

PUMP PERFORMANCE TEST REPORT AS PER IS 8034 : 2002

Rated Voltage : Volts
 Motor Rating : kW
 Model : P4705420
 Max Current : A

No. of Stage :
 Arm Length : m
 O.A. Efficiency : %

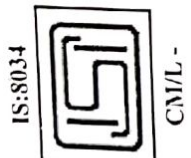
Date : 11/04/2017
 Nominal Duty Head : m
 Discharge At Duty Head : LPS
 Operating Head Range : 62. to 82 m

Sr. No. of Pump Set	General Construction	Earthing Connection	Balancing of Rotor	Terminal Marking	Hydro Static Test at 1.5 Times of Rated Pressure	I.R. Test before & after H.V. Test (Min. 5 MΩ)	H.V. Test at 1.5 KV for 30 sec.	No Load Test at Rated Voltage			Locked Rotor Reading at Rated Voltage			One Per Day			One Out of 10 motors		One per Week				
								Frequency (Hz)	Current (A)	Input Power (w)	Speed (RPM)	Voltage (V)	Current (A)	Input Power (kW)	Max. Out side Diameter of pump set (Max. 98mm)	Shaft Extension Run Out (Max. 35μm)	Concentricity of Mounting Spigot to Shaft (Max. 80μm)	Perpendicularity of Mounting Face of Shaft (Max. 80μm)		Leakage Current (Max. 50mA)	Cooling Media Temp. (°C)	Resistance (Ω)	Measurement of Stator Resistance
089	← Satisfactory →	← Satisfactory →	← Satisfactory →	← Satisfactory →	← Withstood →	← 500k →	← Withstood →	49.9	5.42	1020	2968	218	21.7	332	96.8	20	20	30	05	27.6	224	Satisfactory	
090								49.9	5.48	1040	2966	219	21.6	331									
091								48.9	5.40	1020	2968	220	21.5	330									
092								48.9	5.45	1030	2967	218	21.7	332									
093								50.0	5.46	1030	2971	219	21.6	331									
094								49.9	5.48	1040	2968	220	21.5	330									
095																							
096																							
097																							
098																							

Tested By : 

3X25 (0/F)
 Date- 04/19/18
 3/25(0/F)
 Date- 04/19/18

Name Plate Data :		Motor Rating : 1.1/12 KW/HP
Date : 04-09-2018		Rated Speed : 2800 RPM
Sr. No :		Rated Current : 10.4 A
Model/Type : Ypp1512		Rated Voltage : 230 V
No. of Stages : 12		Category : B
Bore Size (mm) : 100 mm		Rated Freq : 50 Hz
Delivery Size : 32 mm		Connection : Parallel
--- DUTY POINT ---		Method of start : DOL
Head(Htg) : 48 M		Phase : 1-Phase
Discharge (Qgl) : 60.0 lpm		Head Range : 36 to 52.8 M
Overall Eff.(%) : 23 %		



Observed Parameters :

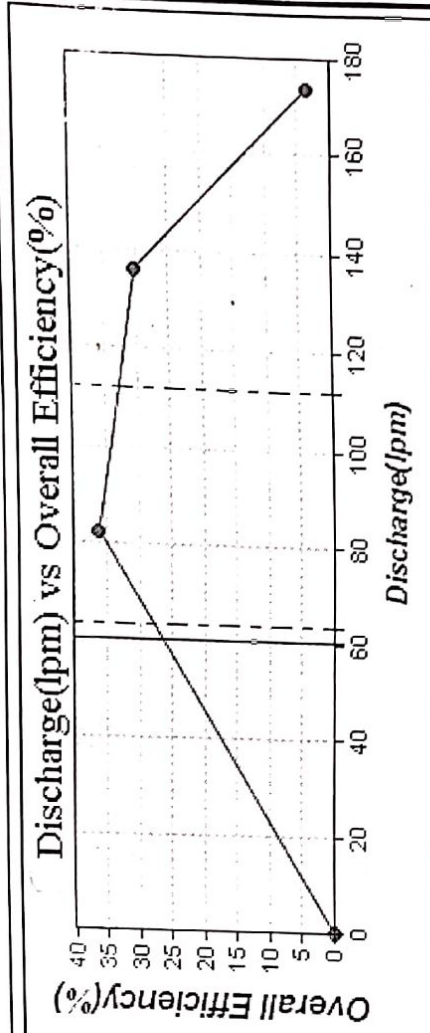
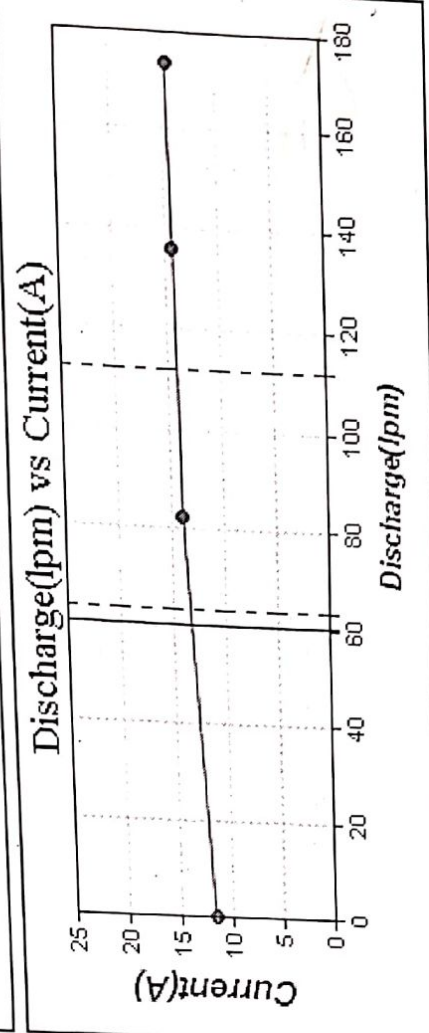
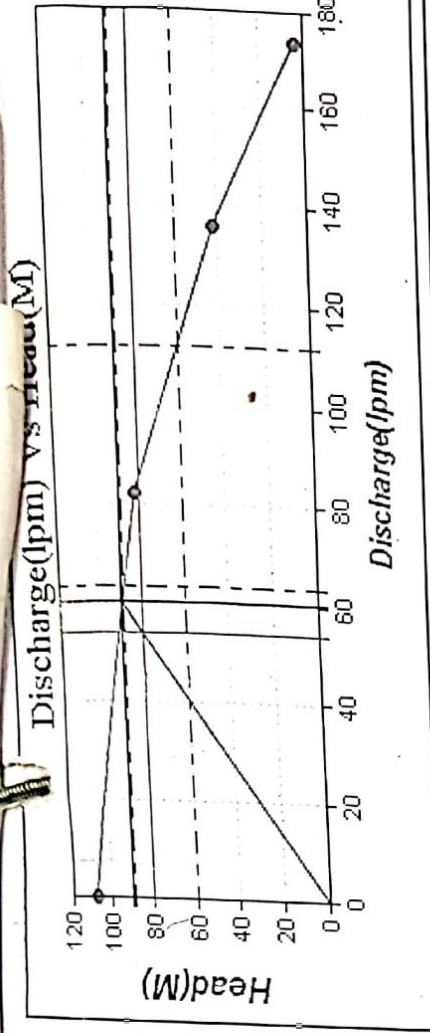
Sr. No.	Head(M)		Disc. (lpm)	Volt (V)	Current (A)			Freq. (Hz)	Obv. Speed (RPM)	Obv. Slip (%)
	Total	Del. Head			R	Y	B			
1	2.00	0.50	124.6	222	18.42		4073	49.83	11.67	2641
2	2.00	60.00	109.6	220	15.05		3315	49.80	7.63	2760
3	2.00	80.00	93.7	218	14.90		3239	49.78	7.83	2753
4	2.00	100.00	74.1	219	14.11		3080	49.77	7.14	2773
5	2.00	130.50	16.4	226	9.25		2072	49.75	4.66	2846
6										
7										
8										
9										
10										

Corrected Parameters :

Sr. No.	Head(M)		Disc. (lpm)	Current (A)	Input (kW)	Corrected @ 50.00 Hz			Overall Eff.(%)	
	Total	Head				Head (M)	Disc. (lpm)	Input (kW)		RPM
1	0.34	2.84	124.6	18.42	4.07	2.86	125.0	4.11	2650	1.42
2	0.26	62.26	109.6	15.05	3.32	62.76	110.0	3.36	2771	33.59
3	0.19	82.19	93.7	14.90	3.24	82.92	94.1	3.28	2765	38.89
4	0.12	102.1	74.1	14.11	3.08	103.07	74.4	3.12	2786	40.19
5	0.01	132.5	16.4	9.25	2.07	133.85	16.5	2.1	2860	17.17
6										
7										
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Conclusion (As Per Graph) :

Z = Distance of Gauge Centre from water level (m)
 h = Delivery gauge reading (m)
 $Vd(2)/2g = \text{Delivery velocity head}$
 $H = z + h + Vd^2(2)/2g$



Approved By

PRAKASH GOLD INDUSTRIES
 B-41 SECTOR-7 NOIDA

Tested By

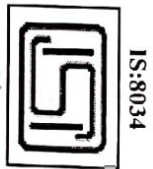
Ph. NO : 9650622055

Remarks:-

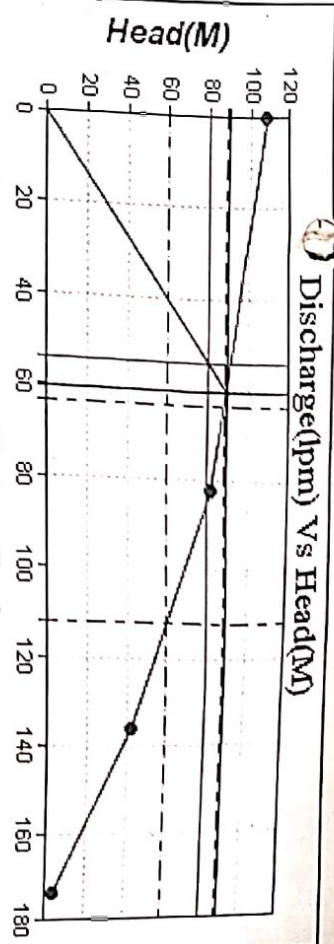
Coars - Impeller 17/11/2018 - 3/20

Name Plate Data :

Date : 17-08-2018	Motor Rating : 1.5/2.0 kW/HP
Sr. No :	Rated Speed : 2790 RPM
Model/Type : PG1-420	Rated Current : 12 A
No. of Stages : 20	Rated Voltage : 240 V
Bore Size (mm) : 100 mm	Category : B
Delivery Size : 32 mm	Rated Freq : 50 Hz
--- DUTY POINT ---	Connection : CSR
Head(Hg) : 80 M	Method of start : DOL
Discharge (Qg) : 54.0 lpm	Phase : 1-Phase
Overall Eff.(%) : 25 %	Head Range : 60 to 88 M



CM/L-



Sr. No.	Head (M)	No. Gauge Del. Dist/Z Head	Disc. (lpm)	Volt (V)	Current (A)			Input (Watt)	Freq. (Hz)	Obv. Slip (%)	Obv. Speed (RPM)
					R	Y	B				
1	2.00	1.50	174.0	221	14.69		3241	50.12	7.42	2784	
2	2.00	40.00	136.4	220	14.31		3141	50.10	7.32	2786	
3	2.00	80.00	82.6	221	13.92		3068	50.09	7.03	2794	
4	2.00	106.50	0.0	223	11.69		2594	50.08	6.25	2817	
5											
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9											
10											

Corrected Parameters :

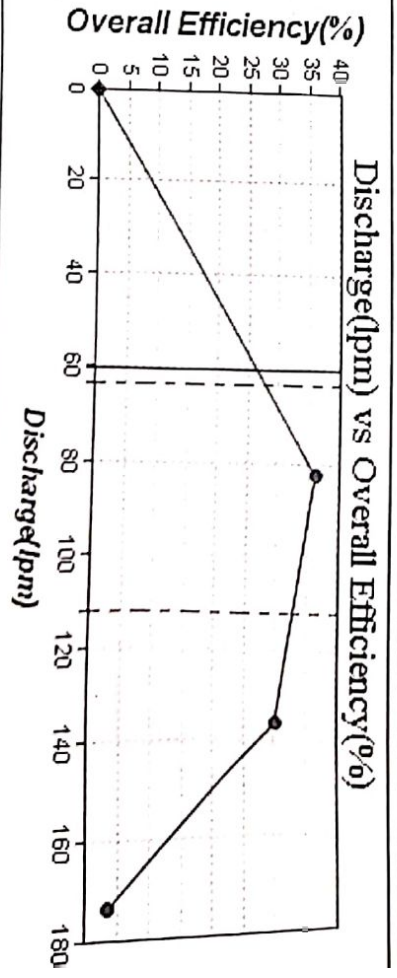
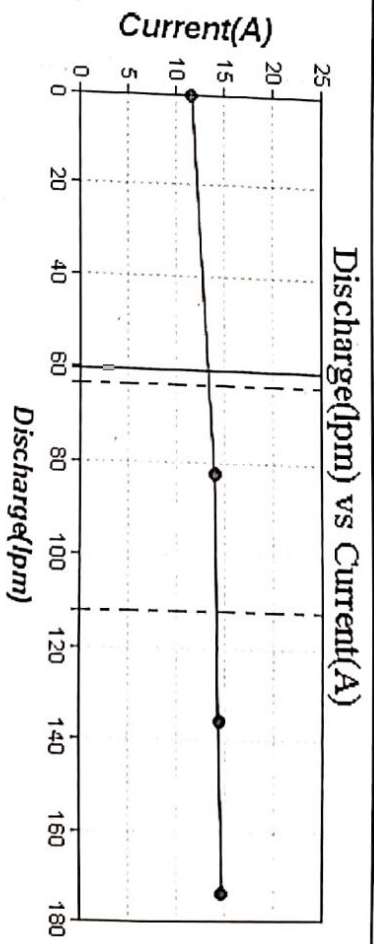
Sr. No.	Head (M)	Total Head	Disc. (lpm)	Current (A)	Input (kW)	Corrected @ 50.00 Hz				
						Head (M)	Disc. (lpm)	Input (kW)	RPM	Overall Eff.(%)
1	0.66	4.16	174.0	14.69	3.24	4.14	173.6	3.22	2777	3.65
2	0.41	42.41	136.4	14.31	3.14	42.24	136.3	3.12	2780	30.12
3	0.15	82.15	82.6	13.92	3.07	81.86	82.5	3.05	2789	36.17
4	0.00	108.5	0.0	11.69	2.59	108.15	0.0	2.58	2813	0.00
5										
6										
7										
8										
9										
10										

Terminology
 Z= Distance of Gauge Centre from water level (m)
 h=Delivery gauge reading (m)
 $Vd^2(2)/2g$ =Delivery velocity head
 $H=z+h+Vd^2(2)/2g$

Conclusion (As Per Graph) :

Confirm to H and Q requirement Hg = 89.01 M And Qg = 60.08 lpm
 Discharge Range : 63.2 lpm To 112.1 lpm
 Overloading requirement failed --- Max. Observed Current = 14.13 A and Rated current = 12 A.

Overall Efficiency = 26.36% > 1.36% of 25.00% Hence pump confirms to overall efficiency requirement.
 aarshi Embedded Systems, Rajkot Ph.: +91 - 281 - 2311780



Approved By

PRAKASH GOLD INDUSTRIES

B-41 SECTOR-7 NOIDA

Ph. NO : 9650622055

Tested By

Remarks:-