

NOTE- PERFORMANCE AS PER ISO 9906 GRADE-2B

PERFORMANCE CURVE OF 6HSTT23 @1480 R.P.M

6HSTT23/Y/0111



PUMPSENSE

HS RANGE

MODEL 6HSTT23

WORKING PRESS. 40 bar

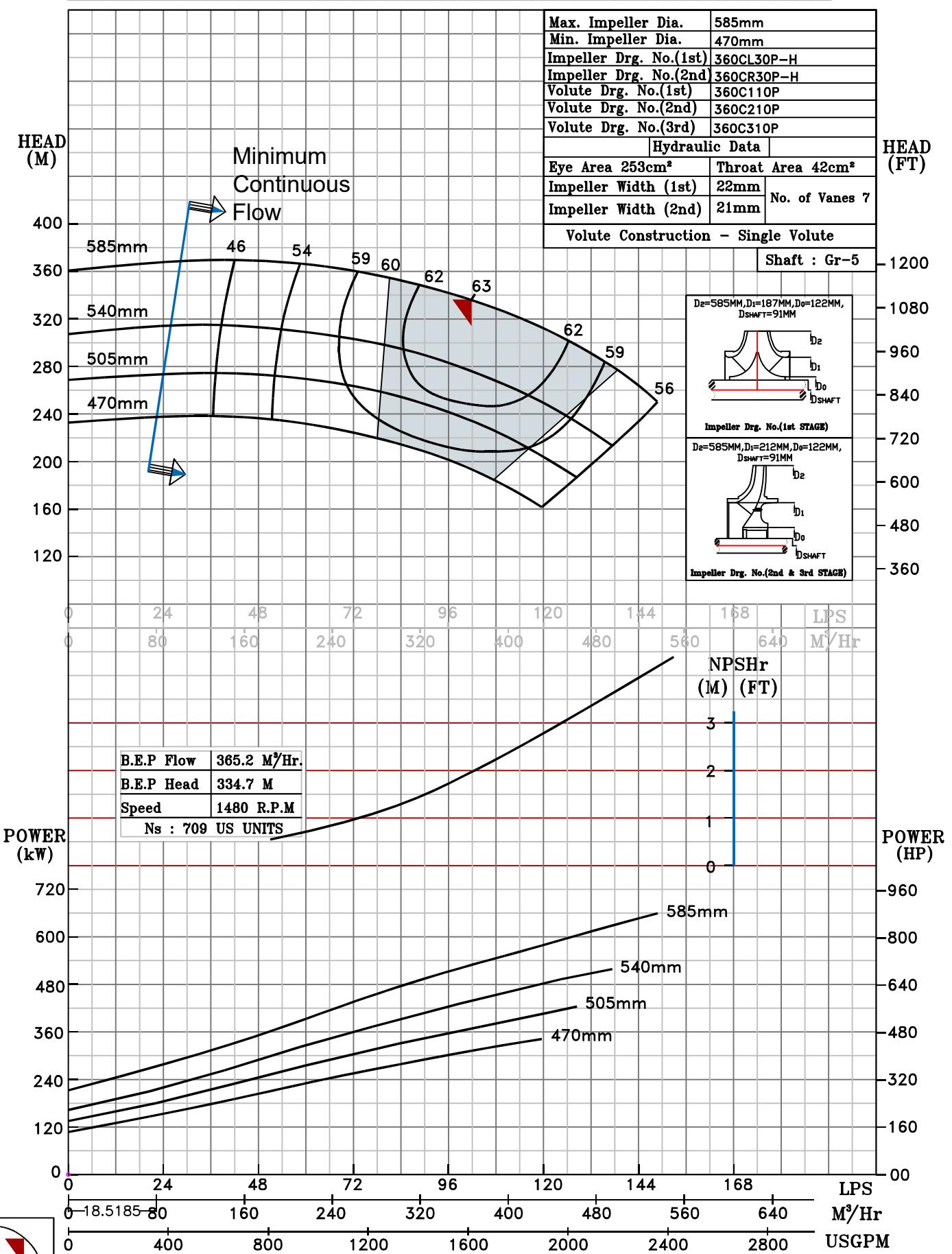
SIZE 200x150-585 TEST PRESS. 60 bar

TYPE-AXIALLY SPLIT CASE THREE STAGE

SPEED 1480 rpm

SHADED REGION ON THE H-Q CURVE REPRESENTS OPTIMUM SELECTION ZONE

PUMP PERFORMANCE CHARACTERISTICS COMPUTED BASED ON CLEAN COLD WATER S.G 1.0



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This technical cross-sectional diagram illustrates a complex mechanical assembly, likely a pump or compressor component. The drawing is oriented with the vertical axis labeled 'Y' at the top and the horizontal axis labeled 'Z' at the bottom. Key features include:

- A large circular housing on the left side.
- A vertical shaft extending from the center through various stages of the assembly.
- Two sets of concentric circular components on the right side, possibly representing bearings or seals.
- Several horizontal dimensions labeled: 580, 365, 365, 165, 160, 460, 580, 820, and 950.
- Vertical dimensions labeled: 1075 and 950.
- Labels indicating specific parts or sections: "Pul AC", "AC", and "AC".
- An arrow pointing to a small detail labeled "G".

CLOCK WISE ROTATION
LOOKING FROM DRIVE END

**CLOCKWISE ROTATION
LOOKING FROM DRIVE END**

**SCALE - 5:1
SHAFT DETAIL AT
COUPLING END**

The drawing consists of two parts. The main part is a front view of a pump assembly. It features a large circular impeller at the bottom, supported by a shaft. The shaft extends upwards through a bearing housing, which is mounted on a base. Various dimensions are indicated: width 400, height 580, and a total height of 820. A suction inlet is shown on the left side. The second part is a detailed view of the coupling end, showing a cross-section of the shaft and coupling components. Dimensions for this detail include a height of 22, a top width of 84.5, a bottom width of 70.5, a thickness of 14, and a bore diameter of $\phi 79$.

This technical drawing illustrates the layout of holes on a sheet metal part. The layout is organized into two main sections: a top section and a bottom section. The top section features a central vertical column of three holes, each with a diameter of 1/2". The horizontal distance between the centers of the top two holes is 365 units, and the distance from the center of the top hole to the left edge is 125 units. The bottom section also contains a vertical column of three holes, with a total width of 360 units. The distance from the left edge to the center of the first hole in the bottom column is 35 units. The overall width of the layout is 630 units. A note specifies that the layout is for a single-sided view, with the reverse side being identical. A dimension of 35 is also present near the bottom left corner.

PUMP FOOT DETAILS

PROJECT NAME—

PROJECT NAME— _____ **JOB NO.—** _____

PUMPSENSE

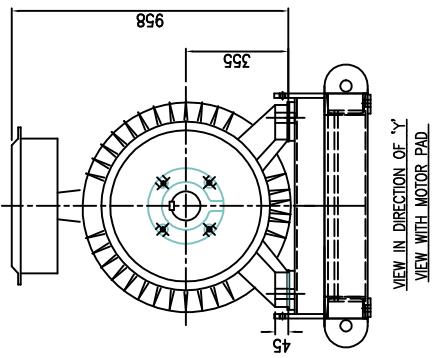
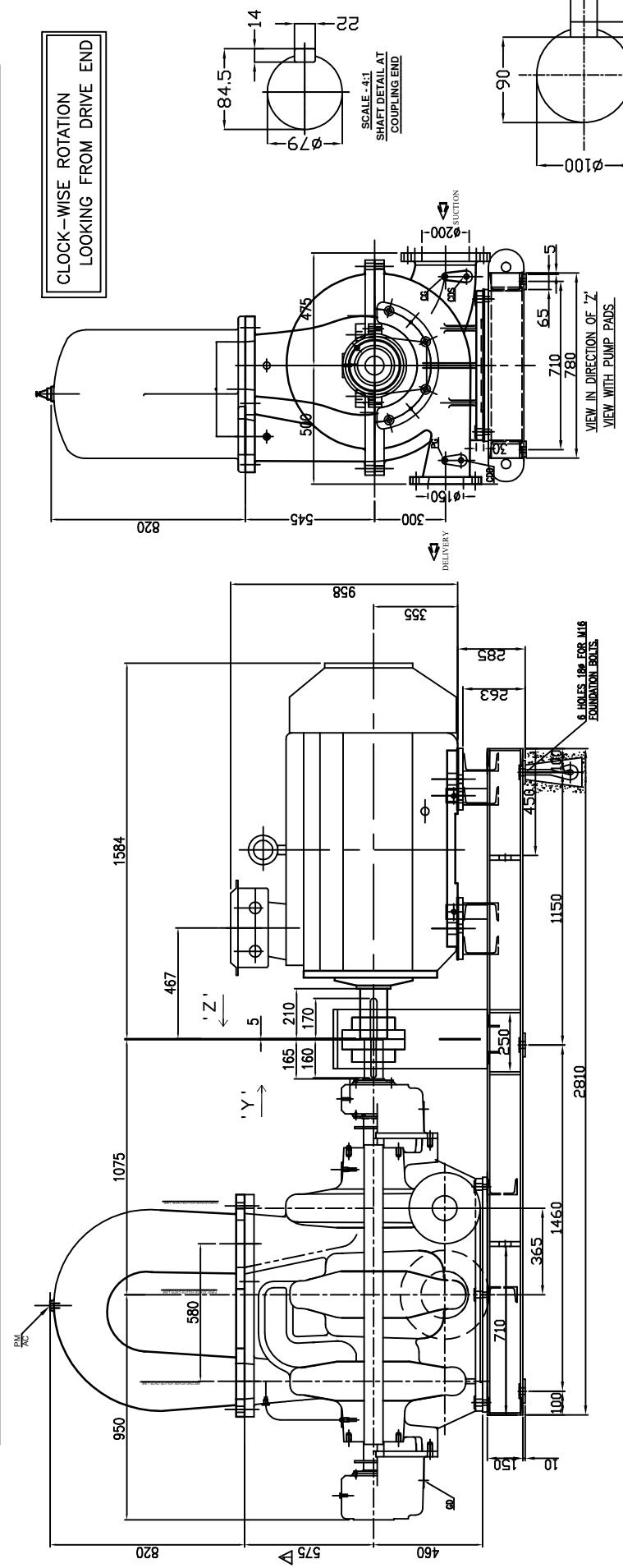
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TITLE						GA DRG. FOR 6HSTT23			SCALE	
REV	DESCRIPTION	DRN	AD	23.06.21	DRG. NO.	REV	1:1			
		CHKD	ST	23.06.21	PSF / 6HSTT23 / GA-02					
2	Height chnged to 580mm	AD	ST	14/8/21						
1	Casing height changed	AD	ST	21/8/21						

CONNECTIONS		ITEM	DESCRIPTION	SIZE(NPT)
GD	GLAND DRAIN		1"	
CG	COMPOUND GAUGE FOR SUCTION		3/8"	
PG	PRESSURE GAUGE FOR DELIVERY		3/8"	
AC	AIR COCK		3/4"	
PM	PRIMING		3/4"	
CDS	CASING DRAIN(SUCTION SIDE)		1/2"	
CDD	CASING DRAIN(DELIVERY SIDE)		1/2"	

GENERAL ARRANGEMENT DRAWING FOR TWO STAGE SPLIT CASE PUMP 6HSTT23 WITH 375KW - FRAME SIZE 355ML

CLOCK-WISE ROTATION
LOOKING FROM DRIVE END



PLAN VIEW OF BASE PLATE

ITEM	DESCRIPTION	SIZE(NPT)
G0	GLAND DRAIN	1"
CG	COMPOUND GAUGE FOR SUCTION	3/8"
PG	PRESSURE GAUGE FOR DELIVERY	3/8"
AC	AIR COCK	1/2"
PM	PRIMING	3/4"
CDS	CASING DRAIN(SUCTION SIDE)	1/2"
CDD	CASING DRAIN(DELIVERY SIDE)	1/2"

** GAGE CONNECTIONS DRILLED AND TAPED ONLY

**...CAUSE CORRECTIONS UNLTD AND ADD ONLY
WHEN SPECIFICALLY REQUESTED BY THE CUSTOMER.**

APPROXIMATE WEIGHTS IN LBS.	
PUMP	3000
MOTOR	2140
BED PLATE	-
COUPLING	20
TOTAL WEIGHT	-
MOTOR DETAILS	
MAKE	ABB
TYPE	TEFC.
KW	375
FR. SIZE	355ML
SPEED	1460 RPM.

PUMPSENSE FLUID ENGINEERING PVT LTD

Datasheet For : 6HSTT23

	PARAMETERS	UNIT	VALUE
RATED DUTY	Capacity	M ³ /Hr	365
	Total Head	Mt	335
	Speed	RPM	1480
	Type of Pump		Axially Split Case Three Stage Pump
	Liquid		Clear Water
	Specific Gravity		1
	Temperature	°C	32
	Driver		Electric motor
PUMP DETAILS	Make		PUMPSENSE
	Stages		Three Stage
	Model No		6HSTT23
	Discharge	mm	150
	Flange Rating Discharge		PN 40
	Suction	mm	200
	Suction Flange Rating		PN 40
	Type of Casing		Single Volute
	Type of Impeller		Two Shrouded Single Entry & One Shrouded Double Entry
	Impeller Diameter Max	mm	585
	Impeller Diameter Min	mm	470
	Rotation		CW
PERFORMANCE DETAILS AS RATED DUTY	Efficiency	%	63
	Rated Speed	RPM	1480
	NPSH _r	m	2.1
	Power Absorbed	kW	528.85
	Recommended Driver Power	kW	650
	Driver Details		4 Pole, 50 Hz, 3 Phase AC Induction Motor
MECHANICAL DATA	Bare Pump Weight	kg	2,976
	Shaft dia. at coupling	mm	79
	N.D.E. Bearing		2 X SKF BECBP 7316
	D.E. Bearing		1 X SKF 6316
	Mechanical Seal	mm	85 mm Balanced Cartridge Mechanical Seal
MATERIALS OF CONSTRUCTION	Casing		Ductile Iron GGG 50
	External Cross Over		Ductile Iron GGG 50
	Impeller		ASTM A743 Gr CF 8M
	Casing Wear Ring		Leaded Bronze BS 1400 LB2
	Inter Stage Bush		Bronze SAE 660 ASTM B505
	Inter Stage Collar		ASTM A 276 Type 316
	Bearing Bracket		Cast Iron CI FG 260
	Shaft		ASTM A 276/ A 182 Type 410
	Impeller nut		ASTM A 276 Type 316
	Mechanical Seal		85 mm Balanced Cartridge Seal - EBIL/ AES/ John Crane
	Fasteners		HTS GR. 10.9

SL.NO.	DESCRIPTION	QTY.	PART NO.
1	SHAFT	1	153
2	IMPELLER 1st STAGE DOUBLE ENTRY	1	102-L/S
3	IMPELLER 2nd STAGE (R.H.)	1	102-R/S
4	IMPELLER 3rd STAGE (L.H.)	1	102-TS/S
5	CASING	1SET	103
6	INTER STAGE BUSH	2	300
7	BEARING BRACKET (P.E)	1	254
8	BEARING BRACKET (F.E)	1	271
9	INTER STAGE SLEEVE	2	404
10	BALANCED CARRIDGE MECHANICAL SEAL	2	151
11	EXTERNAL CROSS OVER	1	306
12	FIRST STAGE CASTING WEAR RING	2	220
13	SECOND & THIRD STAGE CASTING WEAR RING	1+1	222
14	EXTENDED IMPELLER NUT	2	302
15	AIR COCK	1	114
16	WATER SEALING PIPE	2	118
17	BEARING END COVER OUTER (F.E)	1	133
18	BEARING END COVER P.E (INNER & OUTER) & F.E (INNER)	2+1	276
19	BEARING LOCK NUT	1	141
20	BEARING LOCK WASHER	1	142
21	DOWEL PIN FOR BEARING BRACKET	4	--
22	FIRST STAGE IMPELLER KEY	1	137-1S
23	COUPLING KEY	1	138
24	SECOND & THIRD STAGE IMPELLER KEY	1+1	137-2S
25	NON DRIVE END SLEEVE KEY	1	442
26	DRIVE END COUPLING END KEY FOR SLEEVE	1	443
27	BEARING AT POWER END	1	272
28	BEARING AT FREE END	2	257
29	WATER THROWER	2	145
30	BALL VALVE	1	-
31	SHAFT GUARD	2	252
32	STUFFING BOX BUSH (P.E)	1	260
33	STUFFING BOX BUSH (F.E)	1	292
34	BEARING SLEEVE (P.E)	1	444
35	BEARING SLEEVE (F.E)	1	445
36	OIL SEAL SLEEVE AT COUPLING END (DE) OUTER	1	439
37	OIL SEAL SLEEVE AT COUPLING END (DE) INNER	1	440
38	OIL SEAL SLEEVE AT THRUST END (NDE) INNER	1	441
39	OIL SEAL FOR END COVER(95X120X12)	3	--
40	THRUST COLLAR	1	125
41	COVER PLATE FOR BEARING HOUSING (DE)	1	446
42	COVER PLATE FOR BEARING HOUSING (NDE)	1	447

** P.E- POWER END , F.E -FREE END.

