

Pioneering for You

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Offer No # EPL-TECH-NTPC-KORBA-4665 (A) Date : 2025-01-21

Project : NTPC Korba

Customer : Trac Fujico Air Systems LLP

Contractor : Trac Fujico





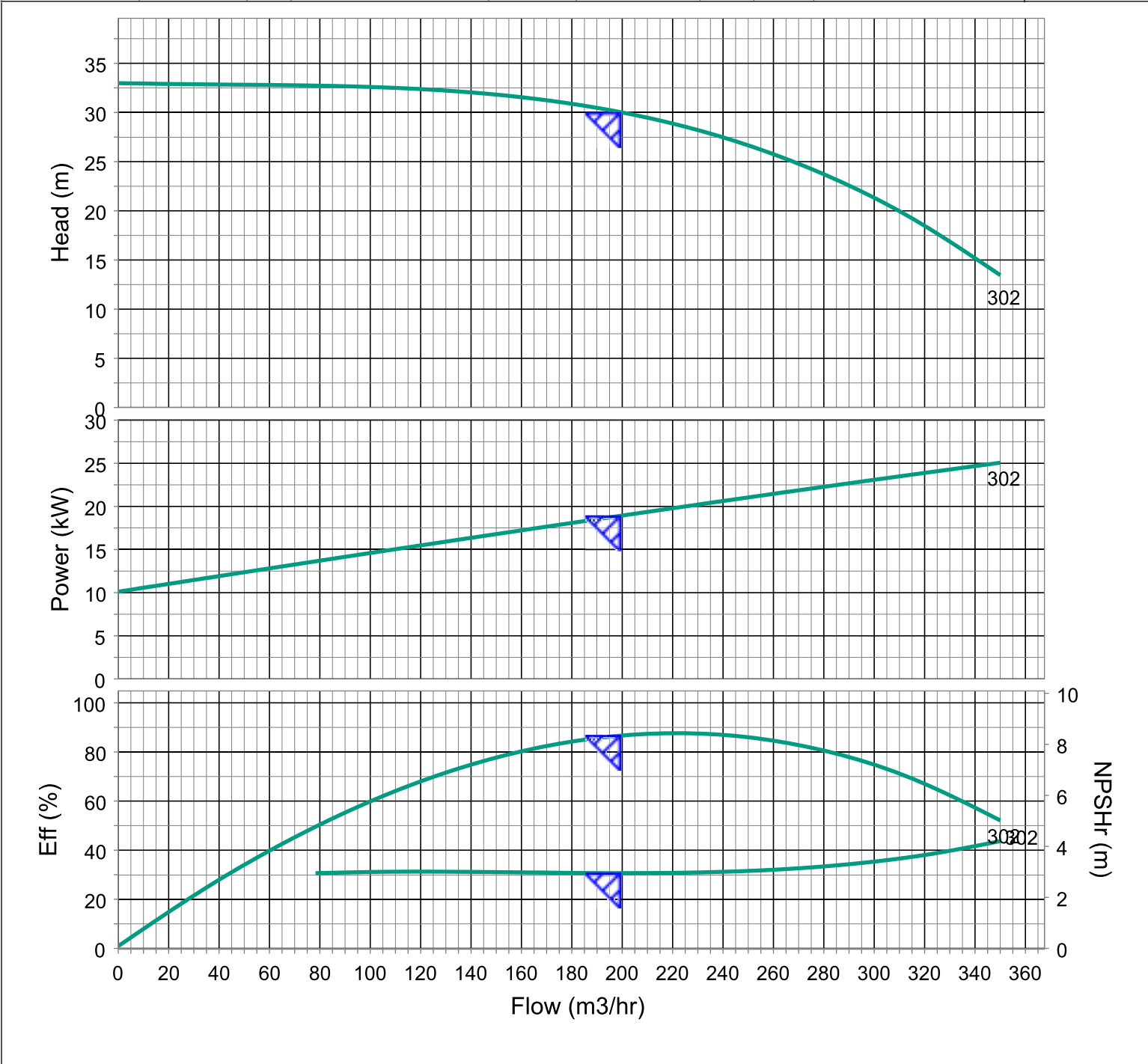
Technical DataSheet

Customer		Trac Fujico Air Systems LLP		Consultant		-			
Project		NTPC Korba		Application		Condensor Water Pump-Korba			
Pump Model		SCPt 125-330 HA		Reference Curve		SCPt 125-330 HA_50_4_C_R02			
Speed		Frequency		Duty Point :		Suction :		Discharge :	
1460 RPM		50 Hz		Q = 200.0 m3/hr H = 30.0 m		150 mm		125 mm	
Customer Details									
Address		-			Tag Number		020		
Enquiry Date		31/05/2024			Reference:		NTPC-LARA-4519		
Offer Date		31/05/2024			Offer No		EPL-TECH-NTPC-LARA-4519		
Operating Conditions									
Capacity		200.0 m3/hr			Fluid		Water		
Head		30.0 m			Specific Gravity *		1		
NPSHA		-			Temperature		-		
Suction Pressure *		1 bar			Viscosity				
System / Pump in System		Standalone / 1			Solid Size *		-		
Total QTY		1			Frequency		50 Hz		
Performance Data @DP									
Efficiency		86.26 %			NPSHR		2.95 m		
Input		18.94 kW			Shut Off Head		33 m		
Max. Power		25.07 kW			Stage		1		
Speed		1460 RPM			Impeller Dia (Approx)		302 mm		
Max allowable soft solid		8 mm			Pump Performance Std		ISO-9906-Gr2B		
Motor Details									
Motor make		CGL			Mounting		B3		
Series		ND			Eff class		IE2		
Specification		TEFC							
Constructional Features					MOC				
Type of Pump		Split Case Pump			Item Description		Specification		
Impeller Type		Closed			CASING BOTTOM HALF		NICI (2-2.5% NICI)		
Bearing (DE/NDE)		6305 2Z / 6305 2Z			CASING TOP HALF		NICI (2-2.5% NICI)		
Bearing Lubrication		Grease			IMPELLER		LTB2 (IS:318, Gr LTB2)		
Rotation (from coupling End)		CW			NECK RING		LTB5 (IS:318, Gr LTB5)		
Recommended Power (Pole)		30.0 kW (4)			SHAFT		SS ASTM A 276 CL 316		
Shaft Sealing		Gland							
Flange Type		ANSI B16.1 CLASS 125 FF							
Painting		Wilo Green							
Pump GD2		-							
Notes :									
1.Suction Pressure more than Vapour Pressure of fluid.									
2.NPSHA>NPSHR by atleast 0.5m									
3.NPSHR at impeller CenterLine / Inlet.									
4.Fluid is not aggressive towards pump components chemically / physically.									
5. * Customer to confirm.									
6. Please revalidate the prime mover selection with respect to Altitude from sea level and apply correction factors as applicable.									
Technical matter is subjected to change without prior notice due to intensive Research & Development activities									
T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040									



Performance Chart

Customer		Trac Fujico Air Systems LLP				Liquid		Water	
Consultant		-				Specific Gravity		1	
Project		NTPC Korba							
Application		Condensor Water Pump-Korba							
Speed 1460 RPM	Frequency	Pump Model SCPt 125-330 HA				Solid Size		8	mm
	50 Hz	Flow	200.0 m3/hr	Head	30.0 m	Stage	1		



Input	18.94 kW	NPSHA	-	Size	Pump Nozzle	Recommended
PrimeMover Power	30.0 kW	NPSHR	2.95 m	Suction (mm)	150	200
Eff	86.26 %	Shut Off Head	33 m	Discharge (mm)	125	125

Tag Number	020	Offer No	EPL-TECH-NTPC-LARA-4519	Prepared By/Checked By		BCB Reddy
				Date		31/05/2024

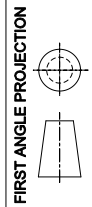
Note : 1.Pump Performance with ISO-9906-Gr2B 2. NPSHa should be at least 0.5 m higher than NPSHr

Technical matter is subjected to change without prior notice due to intensive Research & Development activities indicated impeller diameter is approximate.

Reference: SCPt 125-330 HA_50_4_C_R02

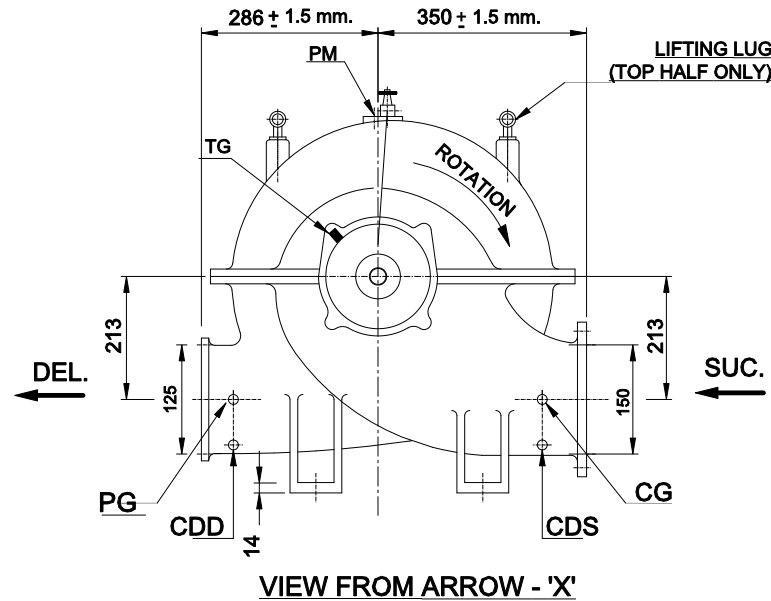
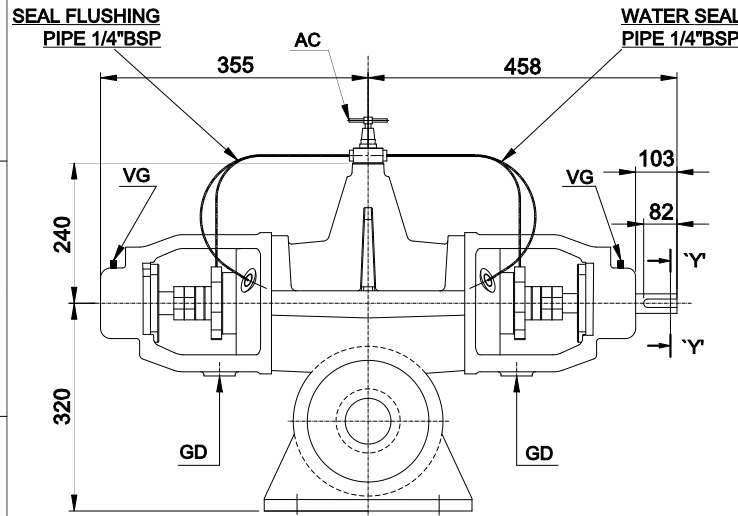
- Please revalidate the prime mover selection with respect to Altitude from sea level and apply correction factors as applicable.

DO NOT SCALE. WORK TO DIMENSIONS.
DEBURR AND REMOVE SHARP EDGES.
DIMENSIONS IN MM. EXCEPT WHERE
OTHERWISE STATED.

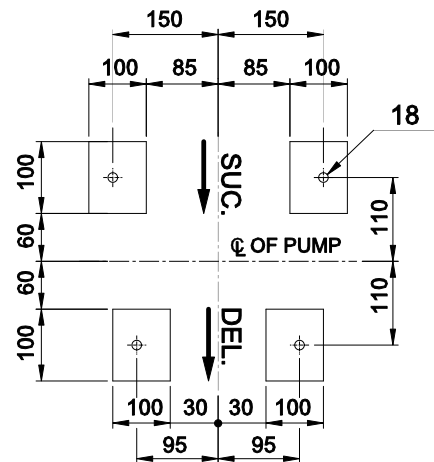


IF IN DOUBT, ASK !

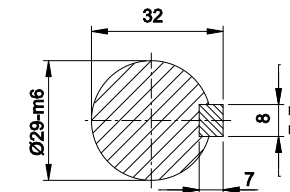
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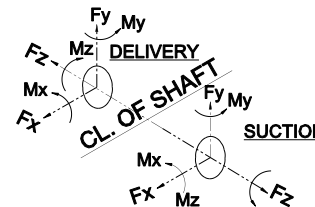
VIEW FROM ARROW - 'X'



PLAN OF PUMP FEET



SECTION ON 'Y-Y'
DETAIL OF PUMP SHAFT
COUPLING END



PUMP DUTY PARAMETERS		
CAPACITY	200	m ³ /hr
NET.GEN.HEAD	30	m
SHUT OFF HEAD	32.98	m
NPSH(r)	2.95	m
EFFICIENCY	86.26	%
KW ABSORBED	18.94	(kW)

BARE PUMP	190	Yes	0.67
MOTOR	252	Yes	
COUPLING	4.3	Yes	0.012
BASE PLATE		Yes	
COMPANION FLANGES	7.5	Yes	
DYNAMIC LOAD	580		
DYNAMIC LOAD PER FOUNDATION BOLT	0		
TOTAL WT. (STATIC LOAD)	446		

QUOTATION/ORDER NO. EPL-TECH-NTPC-LARA-4519

PROJECT DATA	
CLIENT	Trac Fujico Air Systems LLP
CONSULTANT	
END USER	
PROJECT	NTPC
CONTRACTOR	Trac Fujico
SUPPLIED BY	
TAG.NO.	020
APPLICATION	None
QUANTITY	1

TG	TEMPERATURE GAUGE	M8	2
VG	VIBRATION GAUGE	M8	2
GD	GLAND DRAIN	3/4" BSP	2
CDD	CASING DRAIN (DEL. SIDE)	1/2" BSP	1
CDS	CASING DRAIN (SUC. SIDE)	1/2" BSP	1
AC	AIR COCK	3/8" BSP	1
PM	PRIMING	1/2" BSP	1
PG	PR. GAUGE FOR DELIVERY	3/8" BSP	1
CG	COMP. GAUGE FOR SUCTION	3/8" BSP	1
ITEM	CONNECTIONS DETAILS	SIZE	QTY

APPROX WEIGHT IN Kg	SCOPE OF SUPPLY	GD ² (Kg.m)
190	Yes	0.67
252	Yes	
4.3	Yes	0.012
	Yes	
7.5	Yes	
580		
0		
446		

MAXIMUM ALLOWABLE NOZZLE LOADS						
BRANCH	FORCES (N)			MOMENTS (N-m)		
	Fx	Fy	Fz	Mx	My	Mz
SUCTION -150	2490	3110	2050	2300	1180	1780
DELIVERY-125	1955	2445	1605	1615	930	1380

NOTES :		
1	ALL CONNECTIONS ARE PLUGGED EXCEPT GD	
2	BRG : ANTI-FRICTION, LUBRICATION : GREASE	
3	DIRECTION OF ROTATION- CW (From Drive End)	

FLANGE DETAILS AS PER : ANSI B16.1 CLASS 125 FF								
BRANCH	O.D.	P.C.D.	NO. & SIZE OF HOLES OFF CLS	THK	R.F. FLANGE		COMP. FLANGE	
					R.F.DIA	R.F.THK	I/DIA	THK
SUCTION - 150	279	241	8 - Ø22	25	-	-	171	25
DELIVERY-125	254	216	8 - Ø22	24	-	-	144	24

REV.	REVISION	DATE	INITIAL	CHD.



T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040

GENERAL ARRANGEMENT
SCPt 125-330 HA

DRAWN BY	PML	31/05/2024
CHECKED BY	DDW	31/05/2024
APPROVED BY	DDW	31/05/2024

SCALE- NTS	SHEET- DIN A3	REV.
DRAWING No.	EPL-TECH-NTPC-LARA-4519/020	00

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4650	FOUR WAY PIECE	1	SS ASTM A 276 CL 304
4250-2	O RING	2	EPDM
4250-1	O RING	2	EPDM
4230	AIR VENT COCK	1	SS ASTM A 276 CL 304
3250	COUPLING KEY	1	BS 970 80M40 (EN8)
3200	IMPELLER KEY	1	BS 970 80M40 (EN8)
3032	SLEEVE NUT (RH)	2	SS ASTM A 276 CL 410
3031	SLEEVE NUT (LH)	2	SS ASTM A 276 CL 410
3010	LOCK NUT	1	SS ASTM A 276 CL 410
2764	BEARING HOUSING (NDE)	1	C.I. (IS:210 Gr FG260)
2761	BEARING HOUSING (DE)	1	C.I. (IS:210 Gr FG260)
2754	BEARING END COVER (NDE)	1	C.I. (IS:210 Gr FG260)
2751	BEARING END COVER (DE)	1	C.I. (IS:210 Gr FG260)
2600	DEEP GROOVE BALL BEARING (6311 2Z)	2	STEEL
2410	GLAND PACKING	6	GRAPHITED COTTON
2404	STUFFING BOX COVER	2	NICI (2-2.5% NICI)
2300	LOGGING RING	2	GLASS FILLED NYLON
2111	SPACER SLEEVE	2	SS ASTM A 276 CL 410
1800	SHAFT	1	SS ASTM A 276 CL 316
1500	IMPELLER	1	LTB2 (IS:318, Gr LTB2)
1181	NECK RING	2	LTB5 (IS:318, Gr LTB5)
1002	CASING BOTTOM HALF	1	NICI (2-2.5% NICI)
1001	CASING TOP HALF	1	NICI (2-2.5% NICI)
ITEM NO	DESCRIPTION	QTY	SPECIFICATION

Quotation/ Order No : EPL-TECH-NTPC-LARA-4519	
Project Data	
Client	Trac Fujico Air Systems LLP
Consultant	
End User	
Project	NTPC Lara, Chattisgarh
Contractor	Trac Fujico
Supplied By	
Tag No	020
Application	None
Quantity	1

REV.	REVISION	DATE	INITIAL	CHD

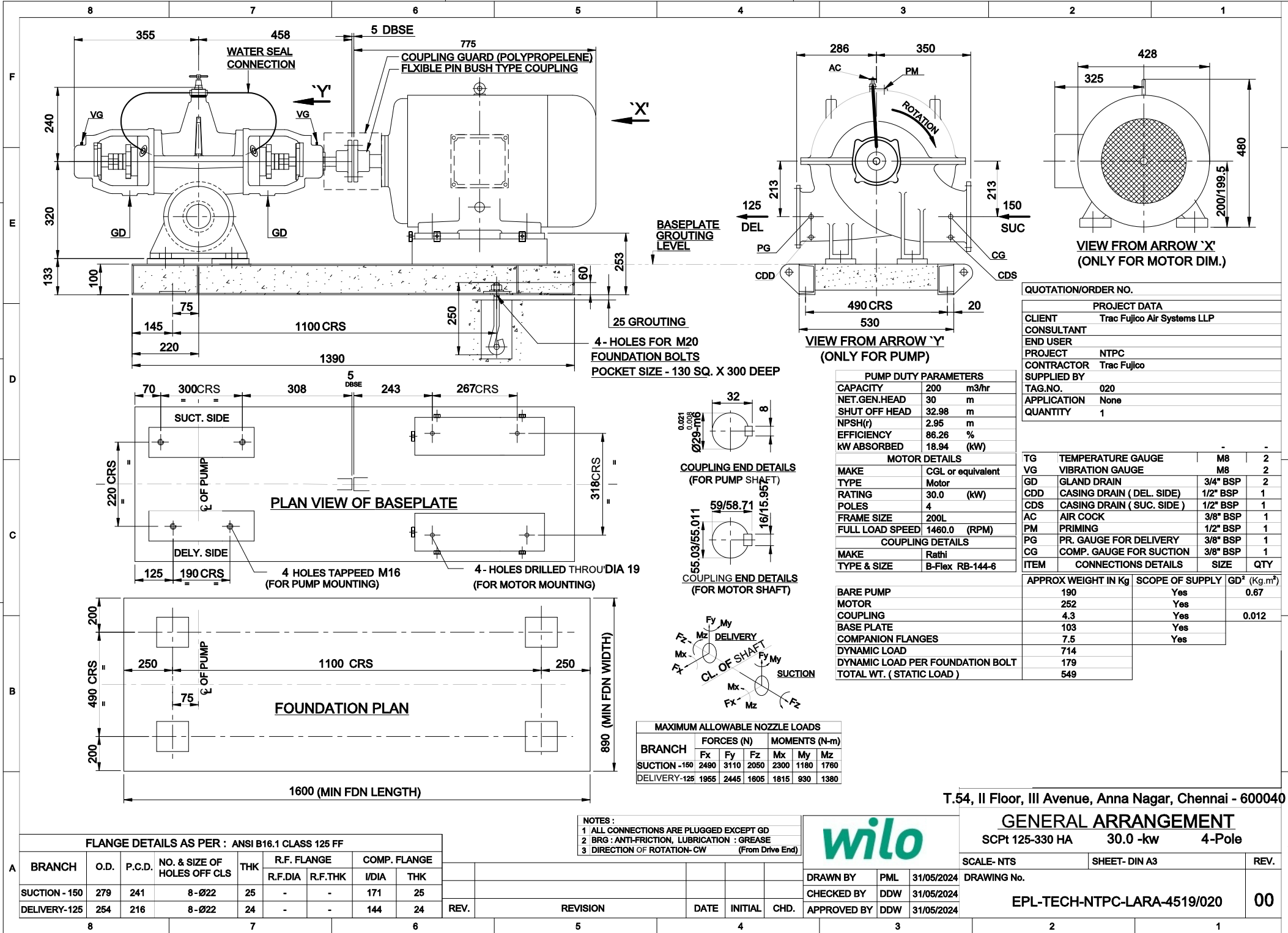


WILO MATHER & PLATT PUMPS PVT. LTD., PUNE-19

**TYPICAL CROSS SECTION FOR
SPLIT CASE PUMP SCPT 125-330 HA
(THROUGH BORE)**

DRAWN BY	PML	31/05/2024	SCALE- NTS	SHEET- DIN A3	REV.
CHECKED BY	DDW	31/05/2024	DRAWING No.		00
APPROVED BY	DDW	31/05/2024	EPL-TECH-NTPC-LARA-4519/020		

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<u>GENERAL ARRANGEMENT</u>		
SCPT 125-330 HA	30.0 -kw	4-Pole
SCALE- NTS	SHEET- DIN A3	REV.
DRAWING No.		00
EPL-TECH-NTPC-LARA-4519/020		

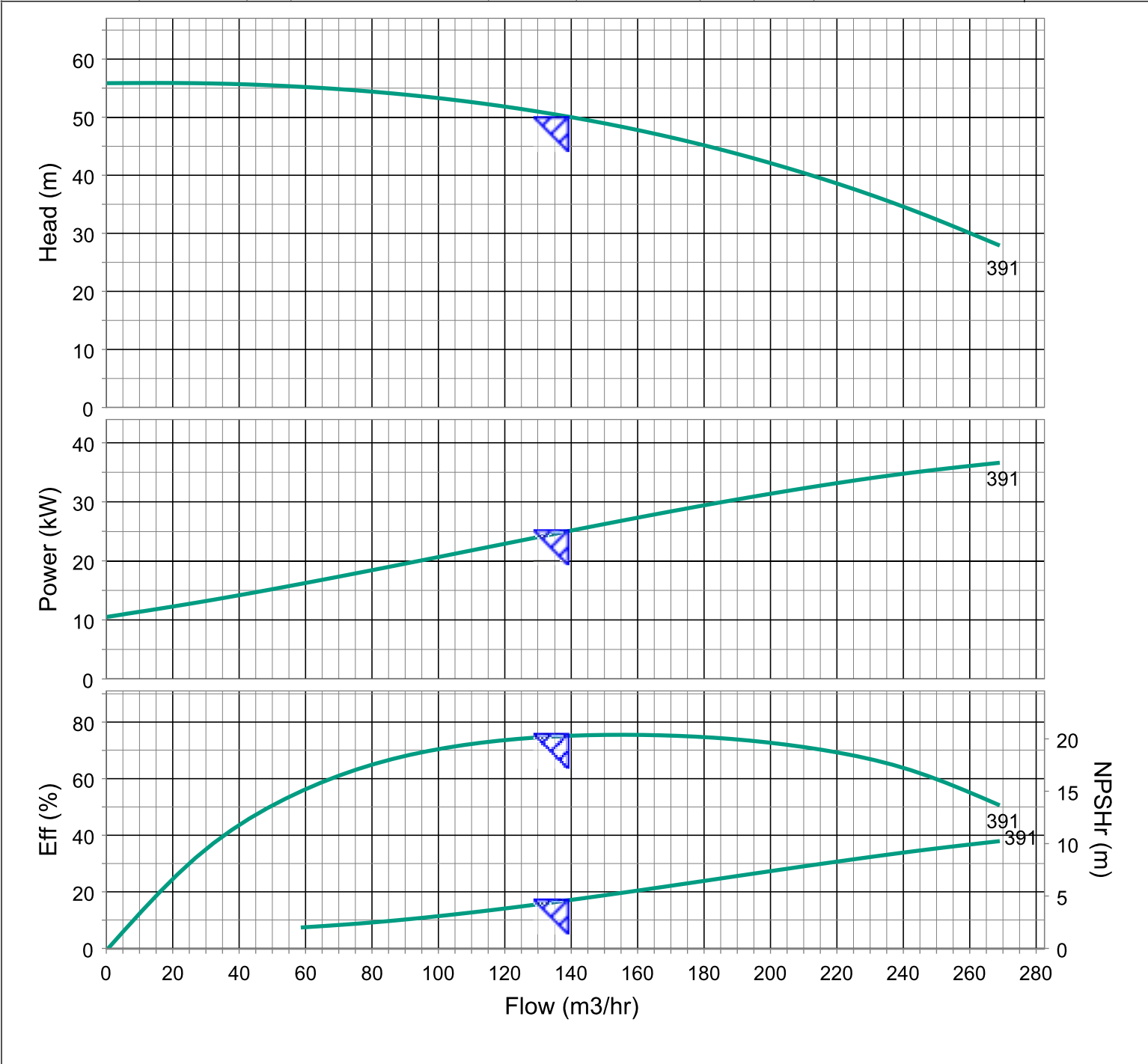


Technical DataSheet

Customer		Trac Fujico Air Systems LLP		Consultant		-					
Project		NTPC Korba		Application		Chilled Water Pump-Korba					
Pump Model		SCPt 80-420 HA		Reference Curve		SCPt 80-420 HA_50_4_A_R01					
Speed		Frequency		Duty Point :		Suction :		Discharge :			
1460 RPM		50 Hz		Q = 140.0 m3/hr		H = 50.0 m		100 mm		80 mm	
Customer Details											
Address		-				Tag Number		019			
Enquiry Date		31/05/2024				Reference:		NTPC-LARA-4519			
Offer Date		31/05/2024				Offer No		EPL-TECH-NTPC-LARA-4519			
Operating Conditions											
Capacity		140.0 m3/hr				Fluid		Water			
Head		50.0 m				Specific Gravity *		1			
NPSHA		-				Temperature		-			
Suction Pressure *		1 bar				Viscosity					
System / Pump in System		Standalone / 1				Solid Size *		-			
Total QTY		1				Frequency		50 Hz			
Performance Data @DP											
Efficiency		75.85 %				NPSHR		4.63 m			
Input		25.13 kW				Shut Off Head		56 m			
Max. Power		36.62 kW				Stage		1			
Speed		1460 RPM				Impeller Dia (Approx)		391 mm			
Max allowable soft solid		0 mm				Pump Performance Std		ISO-9906-Gr2B			
Motor Details											
Motor make		CGL				Mounting		B3			
Series		ND				Eff class		IE2			
Specification		TEFC									
Constructional Features						MOC					
Type of Pump		Split Case Pump				Item Description		Specification			
Impeller Type		Closed				CASING BOTTOM HALF		NICI (2-2.5% NICI)			
Bearing (DE/NDE)		6305 2Z / 6305 2Z				CASING TOP HALF		NICI (2-2.5% NICI)			
Bearing Lubrication		Grease				IMPELLER		LTB2 (IS:318, Gr LTB2)			
Rotation (from coupling End)		CW				NECK RING		LTB5 (IS:318, Gr LTB5)			
Recommended Power (Pole)		30.0 kW (4)				SHAFT		SS ASTM A 276 CL 316			
Shaft Sealing		Gland									
Flange Type		ANSI B16.1 CLASS 125 FF									
Painting		Wilo Green									
Pump GD2		-									
Notes :											
1.Suction Pressure more than Vapour Pressure of fluid.											
2.NPSHA>NPSHR by atleast 0.5m											
3.NPSHR at impeller CenterLine / Inlet.											
4.Fluid is not aggressive towards pump components chemically / physically.											
5. * Customer to confirm.											
6. Please revalidate the prime mover selection with respect to Altitude from sea level and apply correction factors as applicable.											
Technical matter is subjected to change without prior notice due to intensive Research & Development activities											
T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040											

Performance Chart

Customer	Trac Fujico Air Systems LLP							Liquid	Water	
Consultant	-							Specific Gravity	1	
Project	NTPC Korba									
Application	Chilled Water Pump-Korba									
Speed	Frequency	Pump Model SCPt 80-420 HA						Solid Size	-	mm
1460 RPM	50 Hz	Flow	140.0 m3/hr	Head	50.0 m	Stage	1			



Input	25.13 kW	NPSHA	-	Size	Pump Nozzle	Recommended
PrimeMover Power	30.0 kW	NPSHR	4.63 m	Suction (mm)	100	200
Eff	75.85 %	Shut Off Head	56 m	Discharge (mm)	80	100

Tag Number	019	Offer No	EPL-TECH-NTPC-LARA-4519	Prepared By/Checked By	BCB Reddy
				Date	31/05/2024

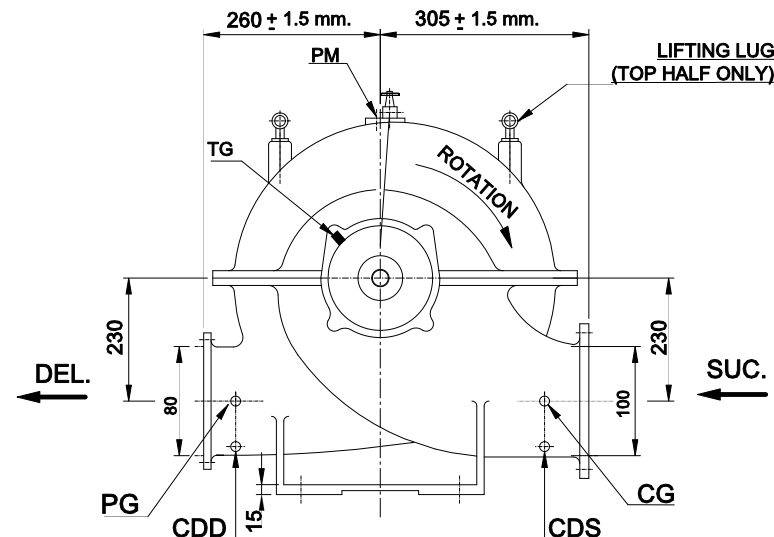
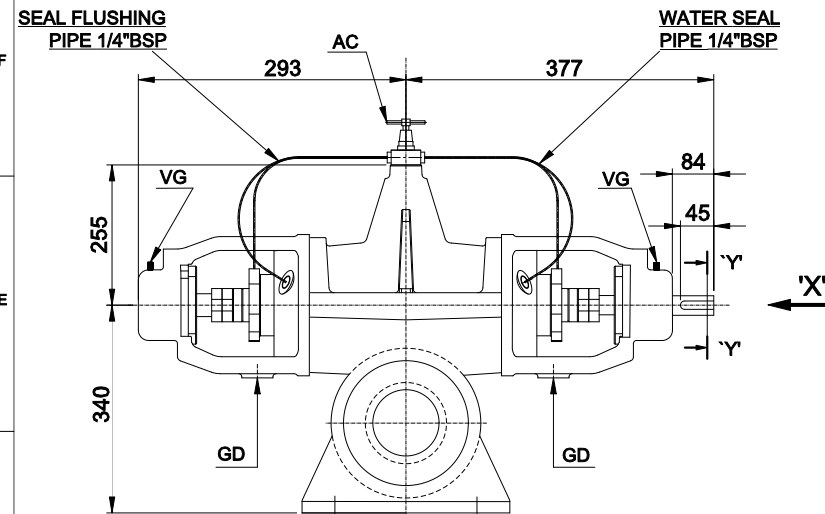
Note : 1.Pump Performance with ISO-9906-Gr2B 2. NPSHa should be at least 0.5 m higher than NPSHr

Technical matter is subjected to change without prior notice due to intensive Research & Development activities indicated impeller diameter is approximate.

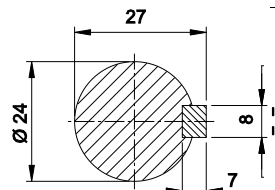
Reference: SCPt 80-420 HA_50_4_A_R01

- Please revalidate the prime mover selection with respect to Altitude from sea level and apply correction factors as applicable.

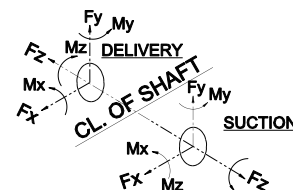
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VIEW FROM ARROW - 'X'



SECTION ON 'Y'-'Y'
DETAIL OF PUMP SHAFT
COUPLING END



PUMP DUTY PARAMETERS		
CAPACITY	140	m ³ /hr
NET.GEN.HEAD	50	m
SHUT OFF HEAD	55.86	m
NPSH(r)	4.63	m
EFFICIENCY	75.85	%
KW ABSORBED	25.13	(kW)

COUPLING DETAILS	
MAKE	Rathi
TYPE & SIZE	B-Flex RB-144-6

BARE PUMP
MOTOR
COUPLING
BASE PLATE
COMPANION FLANGES
DYNAMIC LOAD
DYNAMIC LOAD PER FOUNDATION BOLTS
TOTAL WT. (STATIC LOAD)

QUOTATION/ORDER NO.	
PROJECT DATA	
CLIENT	Trac Fujico Air Systems LLP
CONSULTANT	
END USER	
PROJECT	NTPC
CONTRACTOR	Trac Fujico
SUPPLIED BY	
TAG.NO.	019
APPLICATION	None
QUANTITY	1

VG	TEMPERATURE GAUGE	M8	2
TG	VIBRATION GAUGE	M6	2
GD	GLAND DRAIN	3/8" BSP	2
CDD	CASING DRAIN (DEL. SIDE)	1/2" BSP	1
CDS	CASING DRAIN (SUC. SIDE)	1/2" BSP	1
AC	AIR COCK	3/8" BSP	1
PM	PRIMING	1/2" BSP	1
PG	PR. GAUGE FOR DELIVERY	3/8" BSP	1
CG	COMP. GAUGE FOR SUCTION	3/8" BSP	1

APPROX WEIGHT IN Kg	SCOPE OF SUPPLY	GD ² (Kg.m
188	Yes	2
252	Yes	
4.3	Yes	0.012
	Yes	
6	Yes	

PLAN OF PUMP FEET

FLANGE DETAILS AS PER : ANSI B16.1 CLASS 125 FF								
BRANCH	O.D.	P.C.D.	NO. & SIZE OF HOLES OFF CLS	THK	R.F. FLANGE		COMP. FLANGE	
					R.F.DIA	R.F.THK	I/DIA	THK
SUCTION - 100	229	191	8-Ø19	24	-	-	116	24
DELIVERY-80	191	152	4-Ø19	19	-	-	91	24

MAXIMUM ALLOWABLE NOZZLE LOADS						
BRANCH	FORCES (N)			MOMENTS (N-m)		
	F _x	F _y	F _z	M _x	M _y	M _z
SUCTION -100	1420	1780	1180	1330	680	1000
DELIVERY -80	1070	1330	890	950	470	720

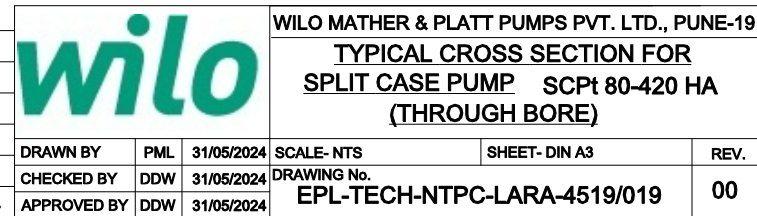
NOTES :	
1	ALL CONNECTIONS ARE PLUGGED EXCEPT GD
2	BRG : ANTI-FRICTION, LUBRICATION : GREASE
3	DIRECTION OF ROTATION- CW (From Drive End)

	T.54, II Floor, III Avenue, Anna Nagar, Chennai - 60004	
	<u>GENERAL ARRANGEMENT</u> SCPt 80-420 HA	
	SCALE- NTS	SHEET- DIN A3
	DRAWING No. -BP	
DRAWN BY	PML	31/05/2024
CHECKED BY	DDW	31/05/2024
APPROVED BY	DDW	31/05/2024

FOLD	HERE
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FOLD	HERE
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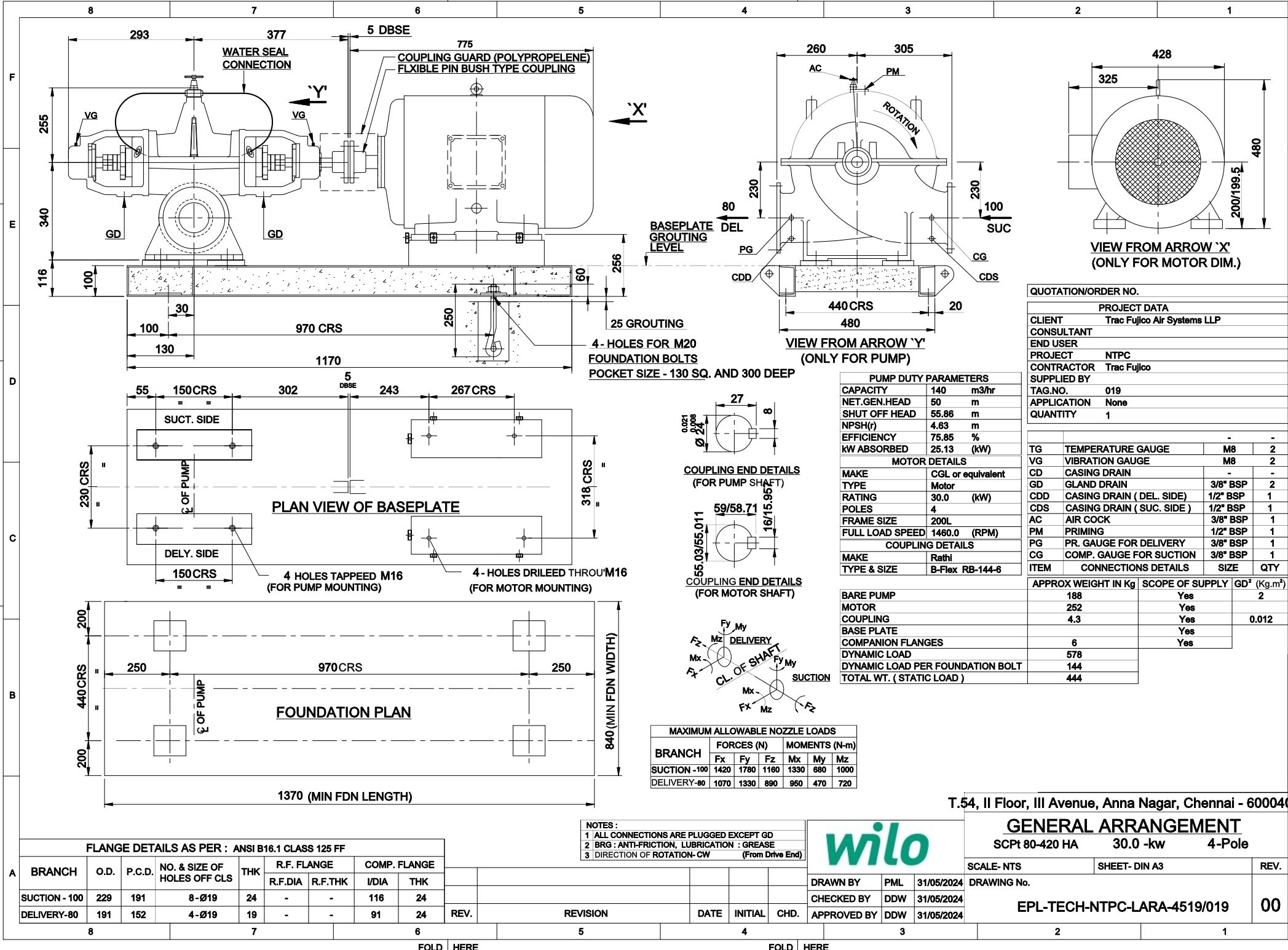


DO NOT SCALE. WORK TO DIMENSIONS.
DEBURR AND REMOVE SHARP EDGES.
DIMENSIONS IN MM. EXCEPT WHERE
OTHERWISE STATED.

FIRST ANGLE PROJECTION

IF IN DOUBT, ASK !

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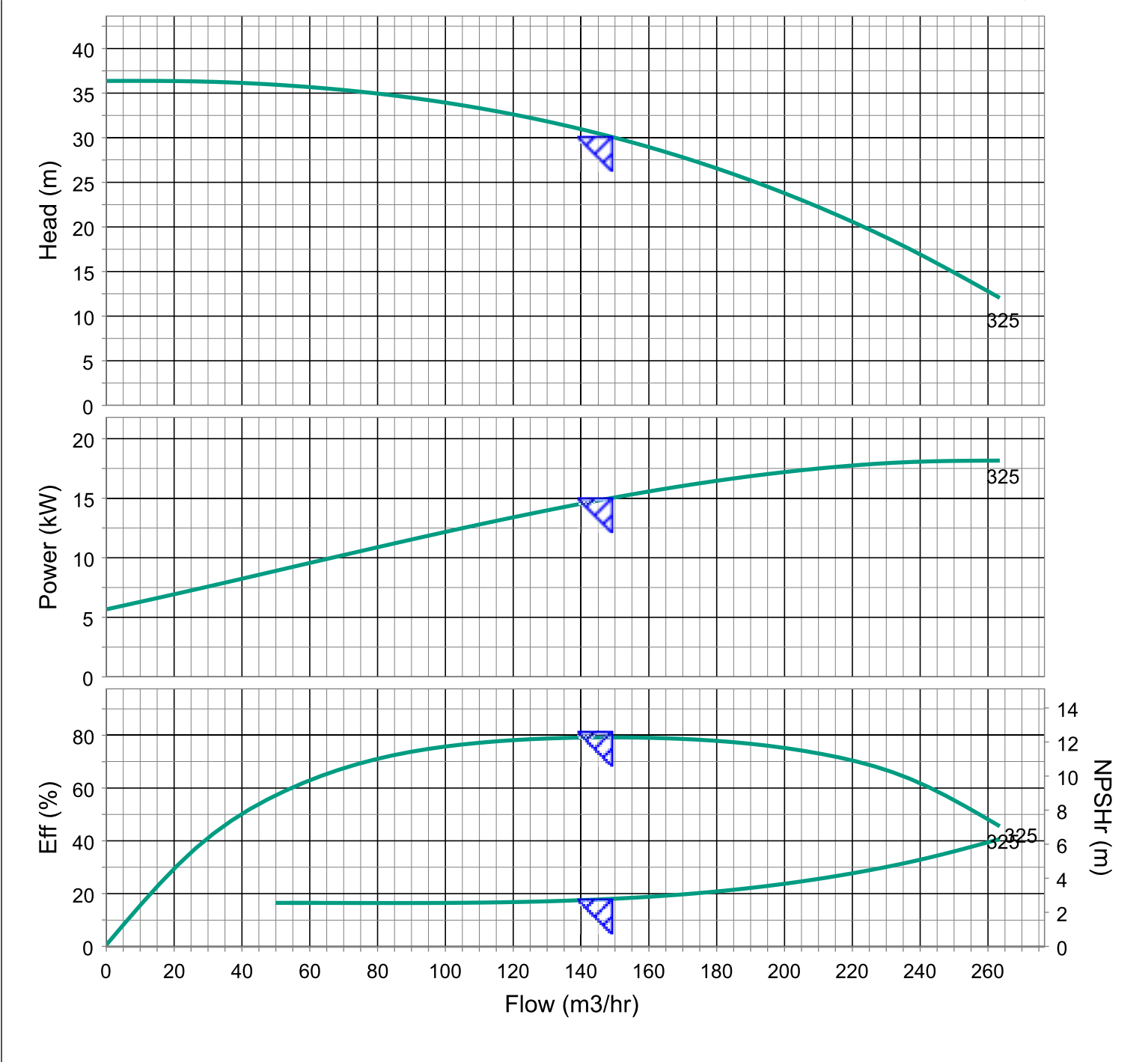
Technical DataSheet

Customer		Trac Fujico Air Systems LLP		Consultant		-			
Project		NTPC Korba		Application		Chilled Water Pump-Korba			
Pump Model		SCPt 100-360 HA		Reference Curve		SCPt 100-360 HA_50_4_B_R02			
Speed		Frequency		Duty Point :		Suction :		Discharge :	
1475 RPM		50 Hz		Q = 150.0 m3/hr H = 30.0 m		125 mm		100 mm	
Customer Details									
Address		-			Tag Number		018		
Enquiry Date		31/05/2024			Reference:		NTPC-LARA-4519		
Offer Date		31/05/2024			Offer No		EPL-TECH-NTPC-LARA-4519		
Operating Conditions									
Capacity		150.0 m3/hr			Fluid		Water		
Head		30.0 m			Specific Gravity *		1		
NPSHA		-			Temperature		-		
Suction Pressure *		1 bar			Viscosity				
System / Pump in System		Standalone / 1			Solid Size *		-		
Total QTY		1			Frequency		50 Hz		
Performance Data @DP									
Efficiency		81.33 %			NPSHR		2.8 m		
Input		15.07 kW			Shut Off Head		36 m		
Max. Power		18.17 kW			Stage		1		
Speed		1475 RPM			Impeller Dia (Approx)		325 mm		
Max allowable soft solid		3 mm			Pump Performance Std		ISO-9906-Gr2B		
Motor Details									
Motor make		CGL			Mounting		B3		
Series		ND			Eff class		IE2		
Specification		TEFC							
Constructional Features					MOC				
Type of Pump		Split Case Pump			Item Description		Specification		
Impeller Type		Closed			CASING BOTTOM HALF		NICI (2-2.5% NICI)		
Bearing (DE/NDE)		6305 2Z / 6305 2Z			CASING TOP HALF		NICI (2-2.5% NICI)		
Bearing Lubrication		Grease			IMPELLER		LTB2 (IS:318, Gr LTB2)		
Rotation (from coupling End)		CW			NECK RING		LTB5 (IS:318, Gr LTB5)		
Recommended Power (Pole)		18.5 kW (4)			SHAFT		SS ASTM A 276 CL 316		
Shaft Sealing		Gland							
Flange Type		ANSI B16.1 CLASS 125 FF							
Painting		Wilo Green							
Pump GD2		-							
Notes :									
1.Suction Pressure more than Vapour Pressure of fluid.									
2.NPSHA>NPSHR by atleast 0.5m									
3.NPSHR at impeller CenterLine / Inlet.									
4.Fluid is not aggressive towards pump components chemically / physically.									
5. * Customer to confirm.									
6. Please revalidate the prime mover selection with respect to Altitude from sea level and apply correction factors as applicable.									
Technical matter is subjected to change without prior notice due to intensive Research & Development activities									
T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040									



Performance Chart

Customer		Trac Fujico Air Systems LLP				Liquid		Water	
Consultant		-				Specific Gravity		1	
Project		NTPC Korba							
Application		Chilled Water Pump-Korba							
Speed 1475 RPM	Frequency	Pump Model SCPt 100-360 HA				Solid Size		3	mm
	50 Hz	Flow	150.0 m3/hr	Head	30.0 m	Stage	1		



Input	15.07 kW	NPSHA	-	Size	Pump Nozzle	Recommended
PrimeMover Power	18.5 kW	NPSHR	2.8 m	Suction (mm)	125	200
Eff	81.33 %	Shut Off Head	36 m	Discharge (mm)	100	125

Tag Number	018	Offer No	EPL-TECH-NTPC-LARA-4519	Prepared By/Checked By	BCB Reddy
				Date	31/05/2024

Note : 1.Pump Performance with ISO-9906-Gr2B 2. NPSHa should be at least 0.5 m higher than NPSHr

Technical matter is subjected to change without prior notice due to intensive Research & Development activities indicated impeller diameter is approximate.

Reference: SCPt 100-360 HA_50_4_B_R02

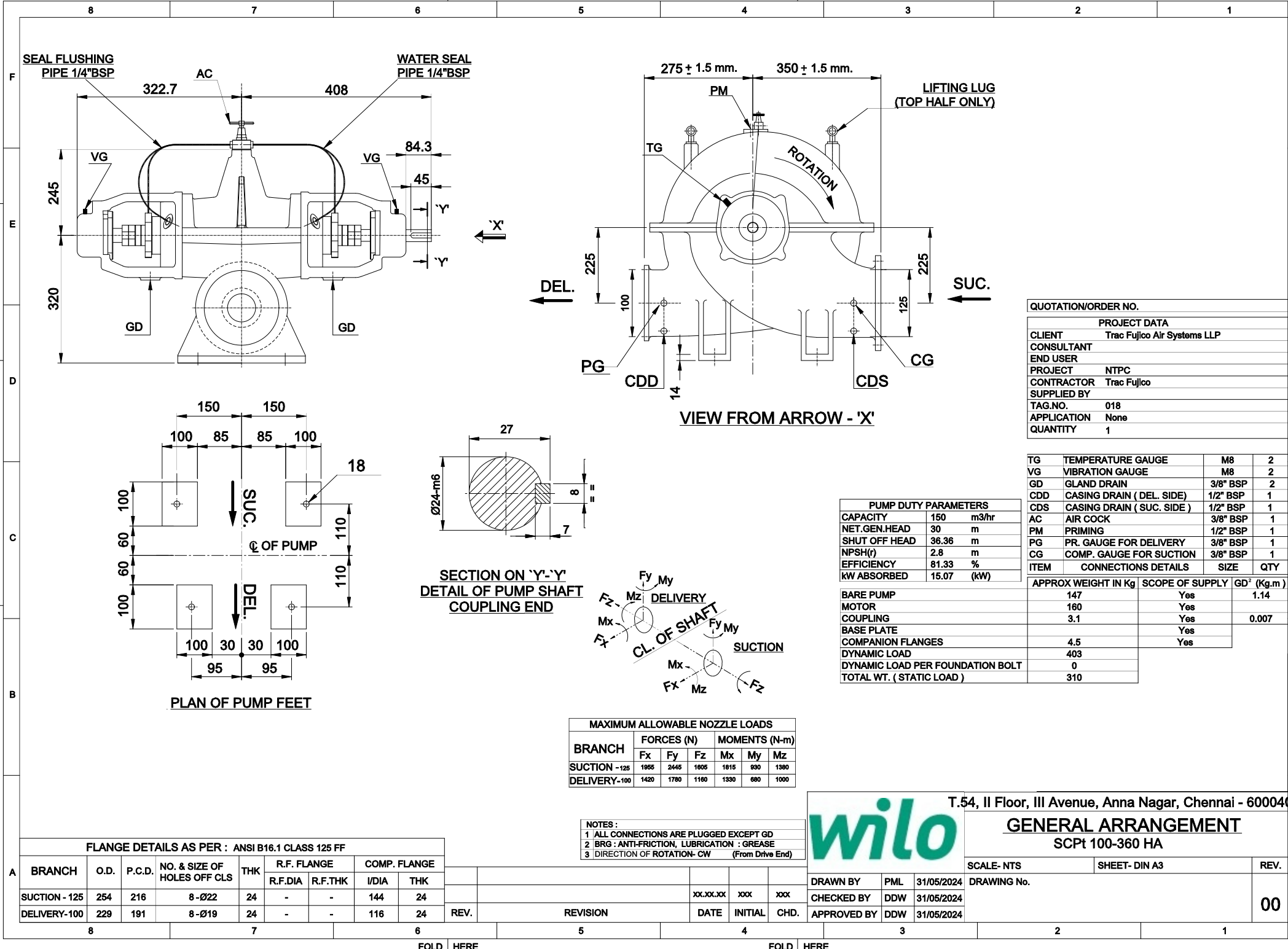
- Please revalidate the prime mover selection with respect to Altitude from sea level and apply correction factors as applicable.

DO NOT SCALE. WORK TO DIMENSIONS.
DEBURR AND REMOVE SHARP EDGES.
DIMENSIONS IN MM. EXCEPT WHERE
OTHERWISE STATED.

FIRST ANGLE PROJECTION

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QUOTATION/ORDER NO.			
PROJECT DATA			
CLIENT	Trac Fujico Air Systems LLP		
CONSULTANT			
END USER			
PROJECT	NTPC		
CONTRACTOR	Trac Fujico		
SUPPLIED BY			
TAG.NO.	018		
APPLICATION	None		
QUANTITY	1		

TG	TEMPERATURE GAUGE	M8	2
VG	VIBRATION GAUGE	M8	2
GD	GLAND DRAIN	3/8" BSP	2
CDD	CASING DRAIN (DEL. SIDE)	1/2" BSP	1
CDS	CASING DRAIN (SUC. SIDE)	1/2" BSP	1
AC	AIR COCK	3/8" BSP	1
PM	PRIMING	1/2" BSP	1
PG	PR. GAUGE FOR DELIVERY	3/8" BSP	1
CG	COMP. GAUGE FOR SUCTION	3/8" BSP	1
ITEM	CONNECTIONS DETAILS	SIZE	QTY

PUMP DUTY PARAMETERS		
CAPACITY	150	m3/hr
NET.GEN.HEAD	30	m
SHUT OFF HEAD	36.36	m
NPSH(r)	2.8	m
EFFICIENCY	81.33	%
KW ABSORBED	15.07	(kW)

BARE PUMP	147	Yes	1.14
MOTOR	160	Yes	
COUPLING	3.1	Yes	0.007
BASE PLATE		Yes	
COMPANION FLANGES	4.5	Yes	
DYNAMIC LOAD	403		
DYNAMIC LOAD PER FOUNDATION BOLT	0		
TOTAL WT. (STATIC LOAD)	310		

APPROX WEIGHT IN Kg	SCOPE OF SUPPLY	GD' (Kg.m)
	Yes	1.14
	Yes	
	Yes	0.007
	Yes	
	Yes	

MAXIMUM ALLOWABLE NOZZLE LOADS						
BRANCH	FORCES (N)			MOMENTS (N-m)		
	Fx	Fy	Fz	Mx	My	Mz
SUCTION -125	1955	2445	1605	1915	930	1380
DELIVERY-100	1420	1780	1160	1330	680	1000

NOTES :
1 ALL CONNECTIONS ARE PLUGGED EXCEPT GD
2 BRG : ANTI-FRICTION, LUBRICATION : GREASE
3 DIRECTION OF ROTATION- CW (From Drive End)

FLANGE DETAILS AS PER : ANSI B16.1 CLASS 125 FF								
BRANCH	O.D.	P.C.D.	NO. & SIZE OF HOLES OFF CLS	THK	R.F. FLANGE		COMP. FLANGE	
					R.F.DIA	R.F.THK	I/DIA	THK
SUCTION - 125	254	216	8 -Ø22	24	-	-	144	24
DELIVERY-100	229	191	8 -Ø19	24	-	-	116	24

REV.	REVISION			DATE	INITIAL	CHD.
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T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040

GENERAL ARRANGEMENT

SCPt 100-360 HA

SCALE- NTS SHEET- DIN A3 REV.

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CHECKED BY DDW 31/05/2024

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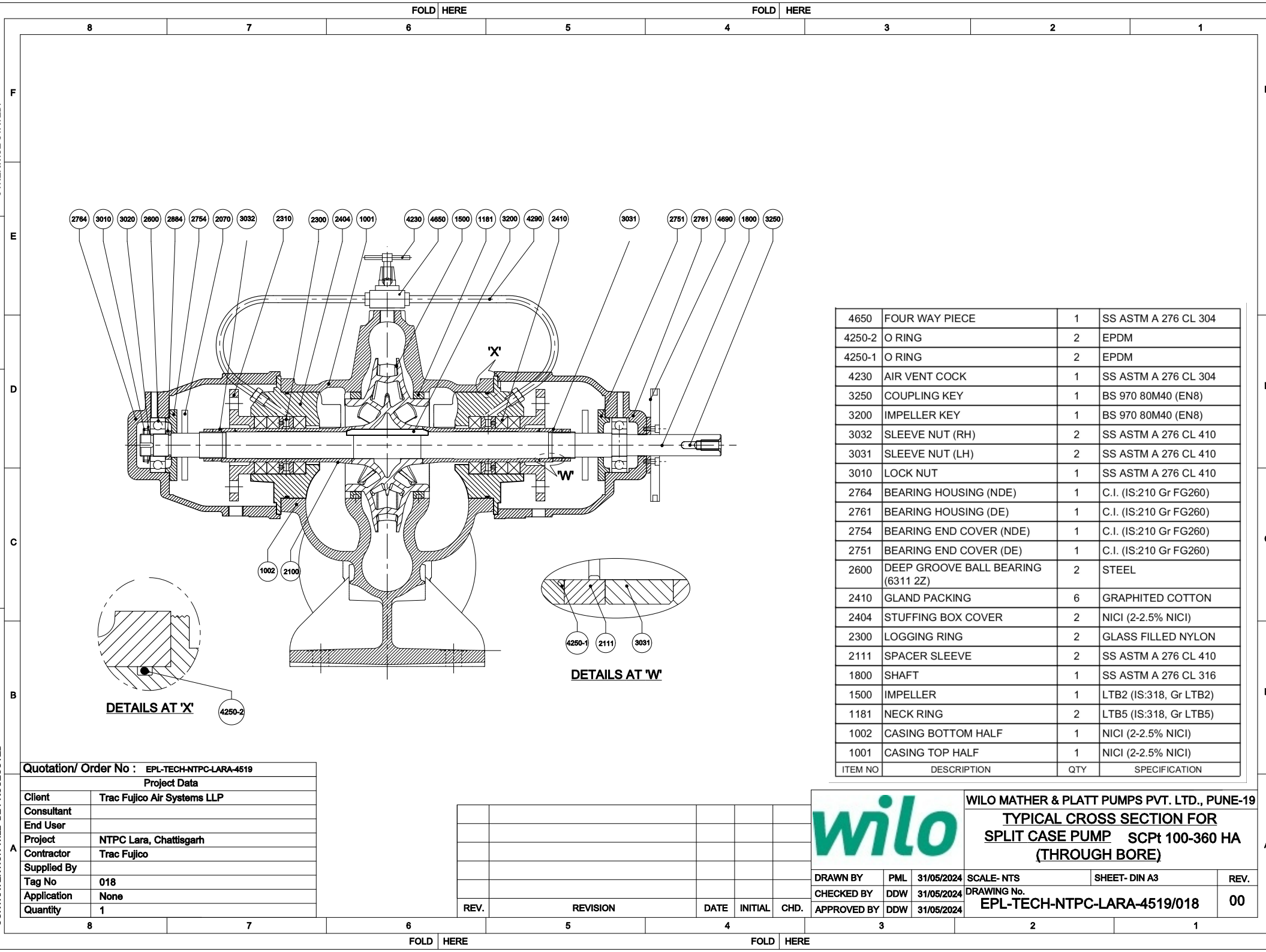
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DIMENSIONS IN MM. EXCEPT WHERE
OTHERWISE STATED.

FIRST ANGLE PROJECTION

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4650	FOUR WAY PIECE	1	SS ASTM A 276 CL 304
4250-2	O RING	2	EPDM
4250-1	O RING	2	EPDM
4230	AIR VENT COCK	1	SS ASTM A 276 CL 304
3250	COUPLING KEY	1	BS 970 80M40 (EN8)
3200	IMPELLER KEY	1	BS 970 80M40 (EN8)
3032	SLEEVE NUT (RH)	2	SS ASTM A 276 CL 410
3031	SLEEVE NUT (LH)	2	SS ASTM A 276 CL 410
3010	LOCK NUT	1	SS ASTM A 276 CL 410
2764	BEARING HOUSING (NDE)	1	C.I. (IS:210 Gr FG260)
2761	BEARING HOUSING (DE)	1	C.I. (IS:210 Gr FG260)
2754	BEARING END COVER (NDE)	1	C.I. (IS:210 Gr FG260)
2751	BEARING END COVER (DE)	1	C.I. (IS:210 Gr FG260)
2600	DEEP GROOVE BALL BEARING (6311 2Z)	2	STEEL
2410	GLAND PACKING	6	GRAPHITED COTTON
2404	STUFFING BOX COVER	2	NICI (2-2.5% NICI)
2300	LOGGING RING	2	GLASS FILLED NYLON
2111	SPACER SLEEVE	2	SS ASTM A 276 CL 410
1800	SHAFT	1	SS ASTM A 276 CL 316
1500	IMPELLER	1	LTB2 (IS:318, Gr LTB2)
1181	NECK RING	2	LTB5 (IS:318, Gr LTB5)
1002	CASING BOTTOM HALF	1	NICI (2-2.5% NICI)
1001	CASING TOP HALF	1	NICI (2-2.5% NICI)
ITEM NO	DESCRIPTION	QTY	SPECIFICATION

Quotation/ Order No : EPL-TECH-NTPC-LARA-4519	
Project Data	
Client	Trac Fujico Air Systems LLP
Consultant	
End User	
Project	NTPC Lara, Chattisgarh
Contractor	Trac Fujico
Supplied By	
Tag No	018
Application	None
Quantity	1

REV.	REVISION	DATE	INITIAL	CHD.



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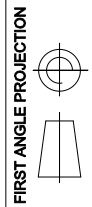
TYPICAL CROSS SECTION FOR

SPLIT CASE PUMP SCPt 100-360 HA

(THROUGH BORE)

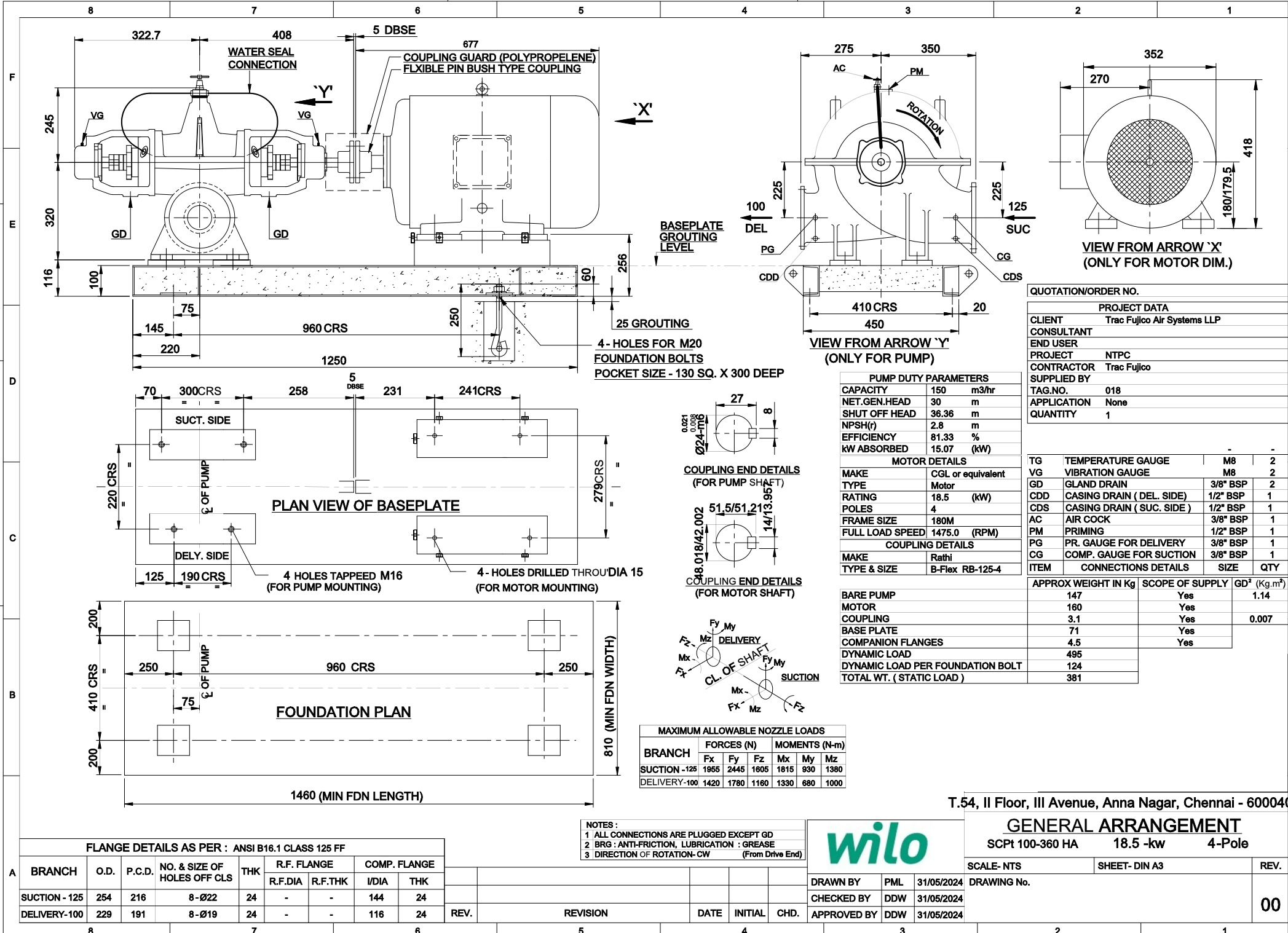
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CHECKED BY	DDW	31/05/2024	DRAWING No.		
APPROVED BY	DDW	31/05/2024	EPL-TECH-NTPC-LARA-4519/018		00

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QUOTATION/ORDER NO.			
PROJECT DATA			
CLIENT	Trac Fujico Air Systems LLP		
CONSULTANT			
END USER			
PROJECT	NTPC		
CONTRACTOR	Trac Fujico		
SUPPLIED BY			
TAG.NO.	018		
APPLICATION	None		
QUANTITY	1		

PUMP DUTY PARAMETERS			
CAPACITY	150	m3/hr	
NET.GEN.HEAD	30	m	
SHUT OFF HEAD	36.36	m	
NPSH(r)	2.8	m	
EFFICIENCY	81.33	%	
KW ABSORBED	15.07	(kW)	

MOTOR DETAILS			
MAKE	CGL or equivalent		
TYPE	Motor		
RATING	18.5	(kW)	
POLES	4		
FRAME SIZE	180M		
FULL LOAD SPEED	1475.0	(RPM)	
COUPLING DETAILS			
MAKE	Rathi		
TYPE & SIZE	B-Flex RB-125-4		

BARE PUMP	147		
MOTOR	160		
COUPLING	3.1		
BASE PLATE	71		
COMPANION FLANGES	4.5		
DYNAMIC LOAD	495		
DYNAMIC LOAD PER FOUNDATION BOLT	124		
TOTAL WT. (STATIC LOAD)	381		

TG	TEMPERATURE GAUGE	M8	2
VG	VIBRATION GAUGE	M8	2
GD	GLAND DRAIN	3/8" BSP	2
CDD	CASING DRAIN (DEL. SIDE)	1/2" BSP	1
CDS	CASING DRAIN (SUC. SIDE)	1/2" BSP	1
AC	AIR COCK	3/8" BSP	1
PM	PRIMING	1/2" BSP	1
PG	PR. GAUGE FOR DELIVERY	3/8" BSP	1
CG	COMP. GAUGE FOR SUCTION	3/8" BSP	1
ITEM	CONNECTIONS DETAILS	SIZE	QTY
APPROX WEIGHT IN Kg		SCOPE OF SUPPLY	GD ² (Kg.m ²)
		Yes	1.14
		Yes	
		Yes	0.007
		Yes	
		Yes	

MAXIMUM ALLOWABLE NOZZLE LOADS						
BRANCH	FORCES (N)			MOMENTS (N-m)		
	Fx	Fy	Fz	Mx	My	Mz
SUCTION -125	1955	2445	1605	1815	930	1380
DELIVERY-100	1420	1780	1160	1330	680	1000

- NOTES :
- 1 ALL CONNECTIONS ARE PLUGGED EXCEPT GD
 - 2 BRG : ANTI-FRICTION, LUBRICATION : GREASE
 - 3 DIRECTION OF ROTATION -CW (From Drive End)



T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040

GENERAL ARRANGEMENT

SCPT 100-360 HA 18.5 -kw 4-Pole

SCALE- NTS SHEET- DIN A3 REV.

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CHECKED BY DDW 31/05/2024

APPROVED BY DDW 31/05/2024

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FLANGE DETAILS AS PER : ANSI B16.1 CLASS 125 FF									
A	BRANCH	O.D.	P.C.D.	NO. & SIZE OF HOLES OFF CLS	THK	R.F. FLANGE		COMP. FLANGE	
						R.F.DIA	R.F.THK	I/DIA	THK
	SUCTION - 125	254	216	8-Ø22	24	-	-	144	24
	DELIVERY-100	229	191	8-Ø19	24	-	-	116	24
	8			7			6		

REV.

REVISION

DATE

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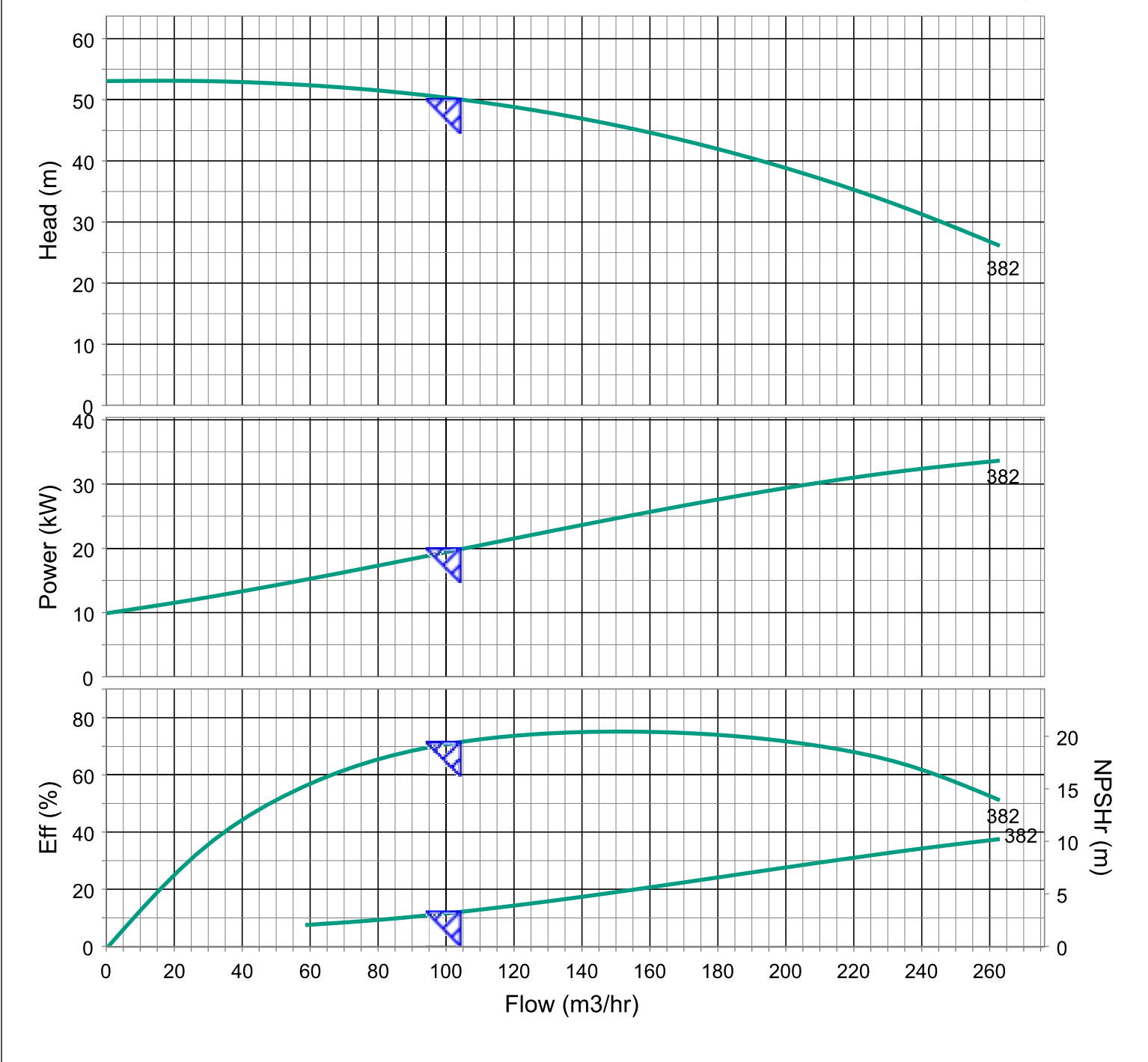
Technical DataSheet

Customer		Trac Fujico Air Systems LLP		Consultant		-			
Project		NTPC Korba		Application		Chilled Water Pump-Korba			
Pump Model		SCPt 80-420 HA		Reference Curve		SCPt 80-420 HA_50_4_A_R01			
Speed		Frequency		Duty Point :		Suction :		Discharge :	
1460 RPM		50 Hz		Q = 105.0 m3/hr H = 50.0 m		100 mm		80 mm	
Customer Details									
Address		-			Tag Number		017		
Enquiry Date		31/05/2024			Reference:		NTPC-LARA-4519		
Offer Date		31/05/2024			Offer No		EPL-TECH-NTPC-LARA-4519		
Operating Conditions									
Capacity		105.0 m3/hr			Fluid		Water		
Head		50.0 m			Specific Gravity *		1		
NPSHA		-			Temperature		-		
Suction Pressure *		1 bar			Viscosity				
System / Pump in System		Standalone / 1			Solid Size *		-		
Total QTY		1			Frequency		50 Hz		
Performance Data @DP									
Efficiency		71.72 %			NPSHR		3.31 m		
Input		19.94 kW			Shut Off Head		53 m		
Max. Power		33.65 kW			Stage		1		
Speed		1460 RPM			Impeller Dia (Approx)		382 mm		
Max allowable soft solid		0 mm			Pump Performance Std		ISO-9906-Gr2B		
Motor Details									
Motor make		CGL			Mounting		B3		
Series		ND			Eff class		IE2		
Specification		TEFC							
Constructional Features					MOC				
Type of Pump		Split Case Pump			Item Description		Specification		
Impeller Type		Closed			CASING BOTTOM HALF		NICI (2-2.5% NICI)		
Bearing (DE/NDE)		6305 2Z / 6305 2Z			CASING TOP HALF		NICI (2-2.5% NICI)		
Bearing Lubrication		Grease			IMPELLER		LTB2 (IS:318, Gr LTB2)		
Rotation (from coupling End)		CW			NECK RING		LTB5 (IS:318, Gr LTB5)		
Recommended Power (Pole)		30.0 kW (4)			SHAFT		SS ASTM A 276 CL 316		
Shaft Sealing		Gland							
Flange Type		ANSI B16.1 CLASS 125 FF							
Painting		Wilo Green							
Pump GD2		-							
Notes : 1.Suction Pressure more than Vapour Pressure of fluid. 2.NPSHA>NPSHR by atleast 0.5m 3.NPSHR at impeller CenterLine / Inlet. 4.Fluid is not aggressive towards pump components chemically / physically. 5. * Customer to confirm. 6. Please revalidate the prime mover selection with respect to Altitude from sea level and apply correction factors as applicable.									
Technical matter is subjected to change without prior notice due to intensive Research & Development activities									
T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040									



Performance Chart

Customer		Trac Fujico Air Systems LLP				Liquid		Water	
Consultant		-				Specific Gravity		1	
Project		NTPC Korba							
Application		Chilled Water Pump-Korba							
Speed 1460 RPM	Frequency	Pump Model SCPt 80-420 HA				Solid Size		-	mm
	50 Hz	Flow	105.0 m3/hr	Head	50.0 m	Stage	1		



Input	19.94 kW	NPSHA	-	Size	Pump Nozzle	Recommended
PrimeMover Power	30.0 kW	NPSHR	3.31 m	Suction (mm)	100	150
Eff	71.72 %	Shut Off Head	53 m	Discharge (mm)	80	100

Tag Number	017	Offer No	EPL-TECH-NTPC-LARA-4519	Prepared By/Checked By	BCB Reddy
				Date	31/05/2024

Note : 1.Pump Performance with ISO-9906-Gr2B 2. NPSHa should be at least 0.5 m higher than NPSHr

Technical matter is subjected to change without prior notice due to intensive Research & Development activities indicated impeller diameter is approximate.

Reference: SCPt 80-420 HA_50_4_A_R01

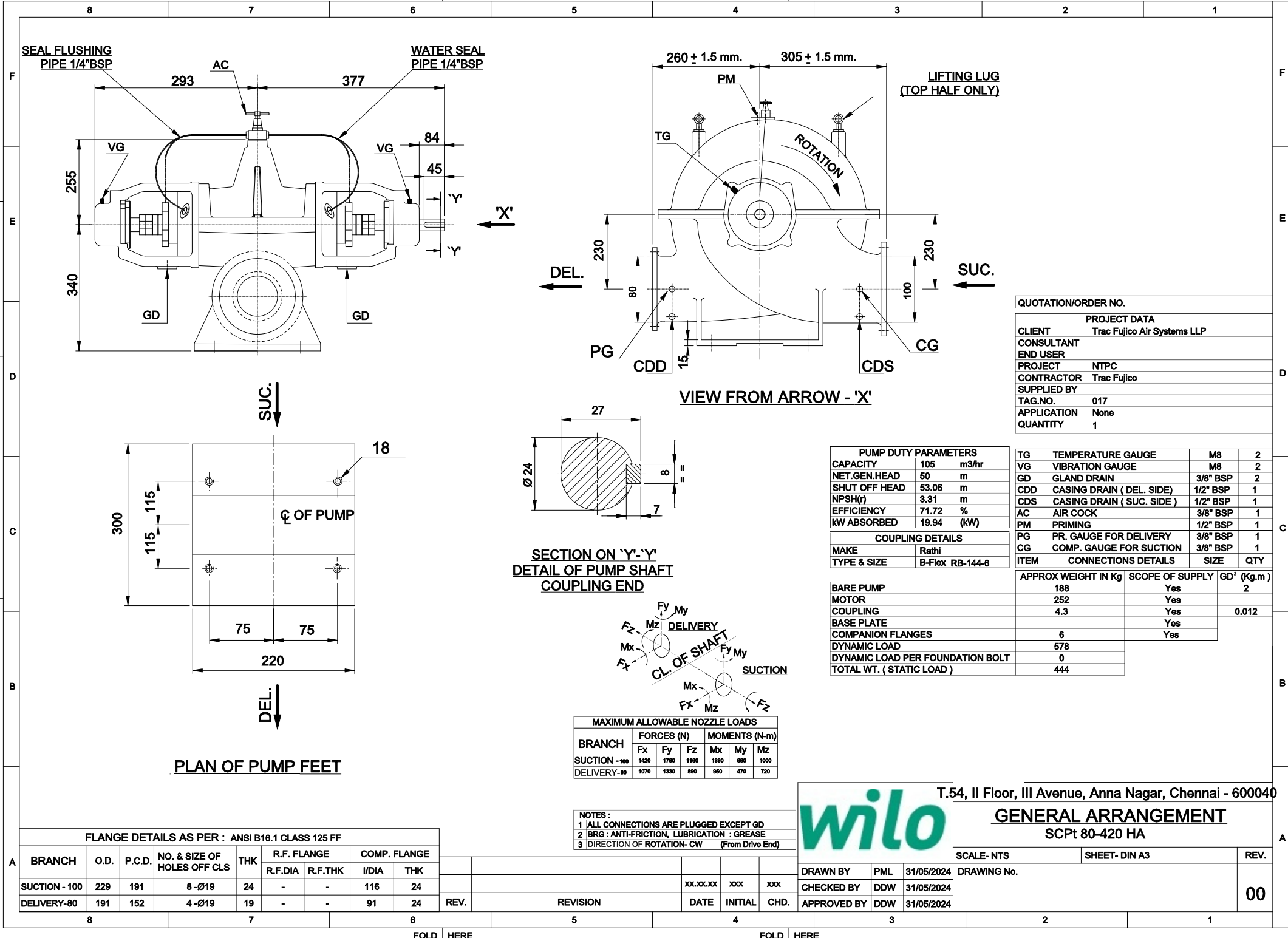
- Please revalidate the prime mover selection with respect to Altitude from sea level and apply correction factors as applicable.

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FIRST ANGLE PROJECTION

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QUOTATION/ORDER NO.			
PROJECT DATA			
CLIENT	Trac Fujico Air Systems LLP		
CONSULTANT			
END USER			
PROJECT	NTPC		
CONTRACTOR	Trac Fujico		
SUPPLIED BY			
TAG.NO.	017		
APPLICATION	None		
QUANTITY	1		

TG	TEMPERATURE GAUGE	M8	2
VG	VIBRATION GAUGE	M8	2
GD	GLAND DRAIN	3/8" BSP	2
CDD	CASING DRAIN (DEL. SIDE)	1/2" BSP	1
CDS	CASING DRAIN (SUC. SIDE)	1/2" BSP	1
AC	AIR COCK	3/8" BSP	1
PM	PRIMING	1/2" BSP	1
PG	PR. GAUGE FOR DELIVERY	3/8" BSP	1
CG	COMP. GAUGE FOR SUCTION	3/8" BSP	1
ITEM	CONNECTIONS DETAILS	SIZE	QTY

	APPROX WEIGHT IN Kg	SCOPE OF SUPPLY	GD ² (Kg.m)
BARE PUMP	188	Yes	2
MOTOR	252	Yes	
COUPLING	4.3	Yes	0.012
BASE PLATE		Yes	
COMPANION FLANGES	6	Yes	
DYNAMIC LOAD	578		
DYNAMIC LOAD PER FOUNDATION BOLT	0		
TOTAL WT. (STATIC LOAD)	444		



T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040

GENERAL ARRANGEMENT

SCPt 80-420 HA

SCALE- NTS	SHEET- DIN A3	REV.
DRAWN BY PML 31/05/2024	DRAWING No.	
CHECKED BY DDW 31/05/2024		
APPROVED BY DDW 31/05/2024		00

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4650	FOUR WAY PIECE	1	SS ASTM A 276 CL 304
4250-2	O RING	2	EPDM
4250-1	O RING	2	EPDM
4230	AIR VENT COCK	1	SS ASTM A 276 CL 304
3250	COUPLING KEY	1	BS 970 80M40 (EN8)
3200	IMPELLER KEY	1	BS 970 80M40 (EN8)
3032	SLEEVE NUT (RH)	2	SS ASTM A 276 CL 410
3031	SLEEVE NUT (LH)	2	SS ASTM A 276 CL 410
3010	LOCK NUT	1	SS ASTM A 276 CL 410
2764	BEARING HOUSING (NDE)	1	C.I. (IS:210 Gr FG260)
2761	BEARING HOUSING (DE)	1	C.I. (IS:210 Gr FG260)
2754	BEARING END COVER (NDE)	1	C.I. (IS:210 Gr FG260)
2751	BEARING END COVER (DE)	1	C.I. (IS:210 Gr FG260)
2600	DEEP GROOVE BALL BEARING (6311 2Z)	2	STEEL
2410	GLAND PACKING	6	GRAPHITED COTTON
2404	STUFFING BOX COVER	2	NICI (2-2.5% NICI)
2300	LOGGING RING	2	GLASS FILLED NYLON
2111	SPACER SLEEVE	2	SS ASTM A 276 CL 410
1800	SHAFT	1	SS ASTM A 276 CL 316
1500	IMPELLER	1	LTB2 (IS:318, Gr LTB2)
1181	NECK RING	2	LTB5 (IS:318, Gr LTB5)
1002	CASING BOTTOM HALF	1	NICI (2-2.5% NICI)
1001	CASING TOP HALF	1	NICI (2-2.5% NICI)
ITEM NO	DESCRIPTION	QTY	SPECIFICATION

Quotation/ Order No : EPL-TECH-NTPC-LARA-4519	
Project Data	
Client	Trac Fujico Air Systems LLP
Consultant	
End User	
Project	NTPC Lara, Chattisgarh
Contractor	Trac Fujico
Supplied By	
Tag No	017
Application	None
Quantity	1

REV.	REVISION	DATE	INITIAL	CHD

wilo

DRAWN BY	PML	31/05/2024	SCALE- NTS	SHEET- DIN A3	REV.
CHECKED BY	DDW	31/05/2024	DRAWING No. EPL-TECH-NTPC-LARA-4519/017		00
APPROVED BY	DDW	31/05/2024			

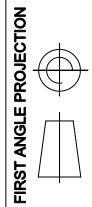
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TYPICAL CROSS SECTION FOR

SPLIT CASE PUMP SCpT 80-420 HA

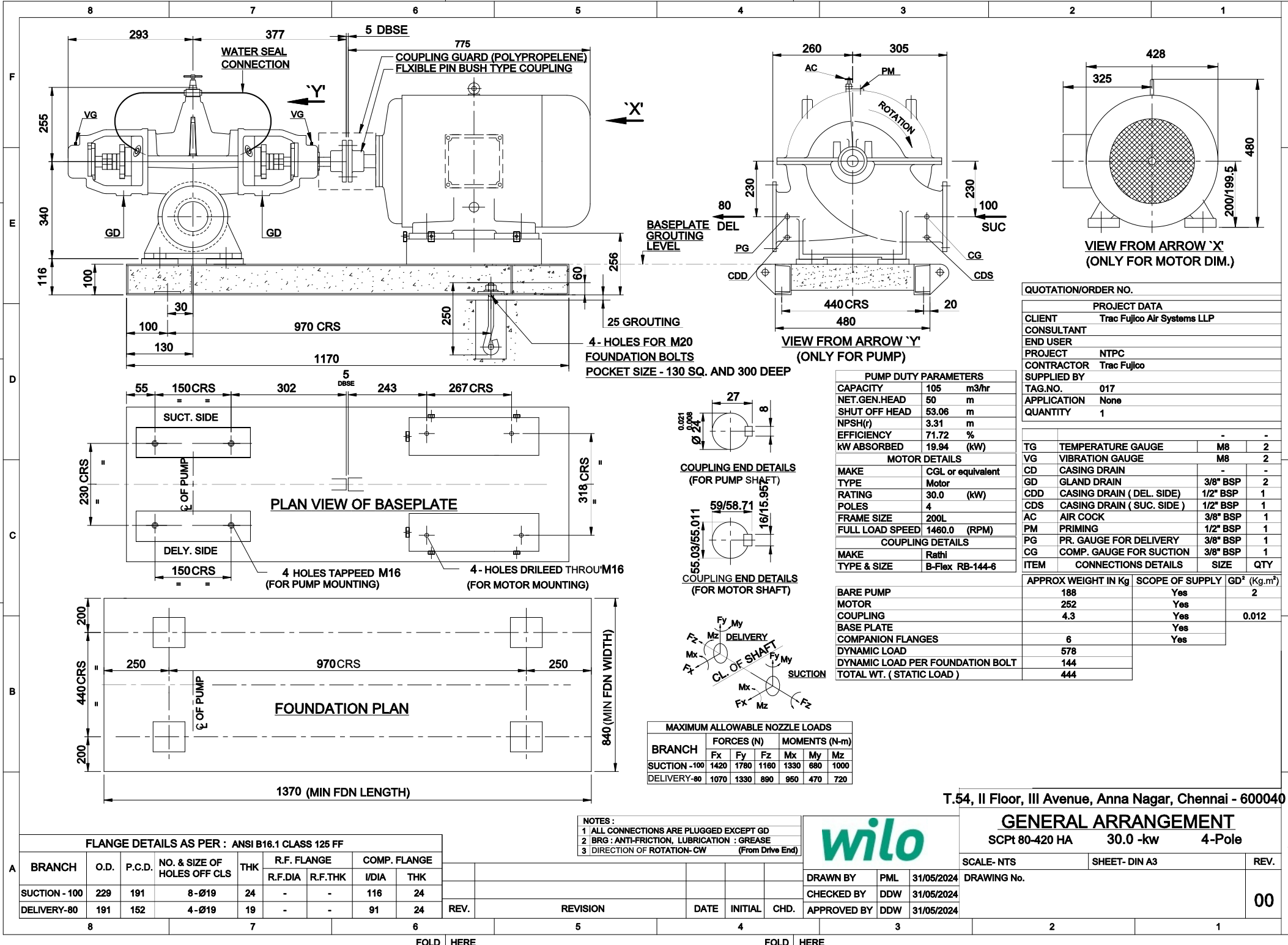
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QUOTATION/ORDER NO.			
PROJECT DATA			
CLIENT	Trac Fujico Air Systems LLP		
CONSULTANT			
END USER			
PROJECT	NTPC		
CONTRACTOR	Trac Fujico		
SUPPLIED BY			
TAG.NO.	017		
APPLICATION	None		
QUANTITY	1		

PUMP DUTY PARAMETERS	
CAPACITY	105 m3/hr
NET.GEN.HEAD	50 m
SHUT OFF HEAD	53.06 m
NPSH(r)	3.31 m
EFFICIENCY	71.72 %
KW ABSORBED	19.94 (kW)

MOTOR DETAILS	
MAKE	CGL or equivalent
TYPE	Motor
RATING	30.0 (kW)
POLES	4
FRAME SIZE	200L
FULL LOAD SPEED	1460.0 (RPM)
COUPLING DETAILS	
MAKE	Rathi
TYPE & SIZE	B-Flex RB-144-6

BARE PUMP	188	Yes	2
MOTOR	252	Yes	
COUPLING	4.3	Yes	0.012
BASE PLATE		Yes	
COMPANION FLANGES	6	Yes	
DYNAMIC LOAD	578		
DYNAMIC LOAD PER FOUNDATION BOLT	144		
TOTAL WT. (STATIC LOAD)	444		

TG	TEMPERATURE GAUGE	M8	2
VG	VIBRATION GAUGE	M8	2
CD	CASING DRAIN	-	-
GD	GLAND DRAIN	3/8" BSP	2
CDD	CASING DRAIN (DEL. SIDE)	1/2" BSP	1
CDS	CASING DRAIN (SUC. SIDE)	1/2" BSP	1
AC	AIR COCK	3/8" BSP	1
PM	PRIMING	1/2" BSP	1
PG	PR. GAUGE FOR DELIVERY	3/8" BSP	1
CG	COMP. GAUGE FOR SUCTION	3/8" BSP	1

ITEM	CONNECTIONS DETAILS	SIZE	QTY
APPROX WEIGHT IN Kg			
SCOPE OF SUPPLY			
GD ² (Kg.m ²)			

MAXIMUM ALLOWABLE NOZZLE LOADS						
BRANCH	FORCES (N)			MOMENTS (N-m)		
	Fx	Fy	Fz	Mx	My	Mz
SUCTION -100	1420	1780	1160	1330	680	1000
DELIVERY-80	1070	1330	890	950	470	720

NOTES :
1 ALL CONNECTIONS ARE PLUGGED EXCEPT GD
2 BRG : ANTI-FRICTION, LUBRICATION : GREASE
3 DIRECTION OF ROTATION-CW (From Drive End)



T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040

GENERAL ARRANGEMENT

SCPt 80-420 HA 30.0 -kw 4-Pole

SCALE- NTS SHEET- DIN A3 REV.

DRAWING No.

DRAWN BY PML 31/05/2024

CHECKED BY DDW 31/05/2024

APPROVED BY DDW 31/05/2024

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FLANGE DETAILS AS PER : ANSI B16.1 CLASS 125 FF								
BRANCH	O.D.	P.C.D.	NO. & SIZE OF HOLES OFF CLS	THK	R.F. FLANGE		COMP. FLANGE	
					R.F.DIA	R.F.THK	I/DIA	THK
SUCTION - 100	229	191	8-Ø19	24	-	-	116	24
DELIVERY-80	191	152	4-Ø19	19	-	-	91	24

REV. REVISION DATE INITIAL CHD.

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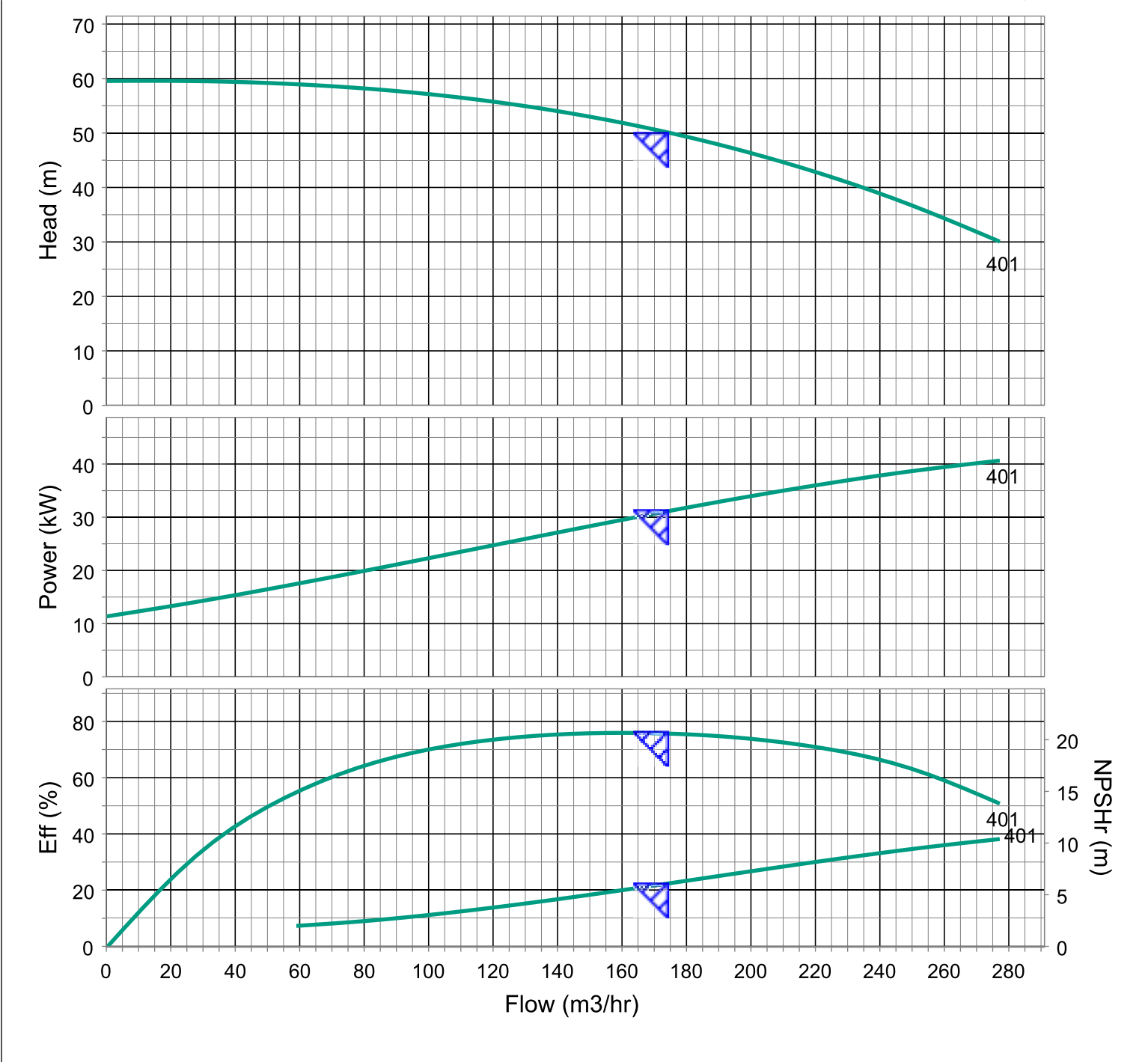
Technical DataSheet

Customer		Trac Fujico Air Systems LLP		Consultant		-			
Project		NTPC Korba		Application		Chilled Water Pump-Korba			
Pump Model		SCPt 80-420 HA		Reference Curve		SCPt 80-420 HA_50_4_A_R01			
Speed		Frequency		Duty Point :		Suction :		Discharge :	
1470 RPM		50 Hz		Q = 175.0 m3/hr H = 50.0 m		100 mm		80 mm	
Customer Details									
Address		-			Tag Number		015		
Enquiry Date		31/05/2024			Reference:		NTPC-LARA-4519		
Offer Date		31/05/2024			Offer No		EPL-TECH-NTPC-LARA-4519		
Operating Conditions									
Capacity		175.0 m3/hr			Fluid		Water		
Head		50.0 m			Specific Gravity *		1		
NPSHA		-			Temperature		-		
Suction Pressure *		1 bar			Viscosity				
System / Pump in System		Standalone / 1			Solid Size *		-		
Total QTY		1			Frequency		50 Hz		
Performance Data @DP									
Efficiency		76.32 %			NPSHR		6.12 m		
Input		31.22 kW			Shut Off Head		60 m		
Max. Power		40.64 kW			Stage		1		
Speed		1470 RPM			Impeller Dia (Approx)		401 mm		
Max allowable soft solid		0 mm			Pump Performance Std		ISO-9906-Gr2B		
Motor Details									
Motor make		CGL			Mounting		B3		
Series		ND			Eff class		IE2		
Specification		TEFC							
Constructional Features					MOC				
Type of Pump		Split Case Pump			Item Description		Specification		
Impeller Type		Closed			CASING BOTTOM HALF		NICI (2-2.5% NICI)		
Bearing (DE/NDE)		6305 2Z / 6305 2Z			CASING TOP HALF		NICI (2-2.5% NICI)		
Bearing Lubrication		Grease			IMPELLER		LTB2 (IS:318, Gr LTB2)		
Rotation (from coupling End)		CW			NECK RING		LTB5 (IS:318, Gr LTB5)		
Recommended Power (Pole)		37.0 kW (4)			SHAFT		SS ASTM A 276 CL 316		
Shaft Sealing		Gland							
Flange Type		ANSI B16.1 CLASS 125 FF							
Painting		Wilo Green							
Pump GD2		-							
Notes :									
1.Suction Pressure more than Vapour Pressure of fluid.									
2.NPSHA>NPSHR by atleast 0.5m									
3.NPSHR at impeller CenterLine / Inlet.									
4.Fluid is not aggressive towards pump components chemically / physically.									
5. * Customer to confirm.									
6. Please revalidate the prime mover selection with respect to Altitude from sea level and apply correction factors as applicable.									
Technical matter is subjected to change without prior notice due to intensive Research & Development activities									
T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040									



Performance Chart

Customer		Trac Fujico Air Systems LLP				Liquid		Water	
Consultant		-				Specific Gravity		1	
Project		NTPC Korba							
Application		Chilled Water Pump-Korba							
Speed 1470 RPM	Frequency	Pump Model SCPt 80-420 HA				Solid Size		-	mm
	50 Hz	Flow	175.0 m3/hr	Head	50.0 m	Stage	1		



Input	31.22 kW	NPSHA	-	Size	Pump Nozzle	Recommended
PrimeMover Power	37.0 kW	NPSHR	6.12 m	Suction (mm)	100	200
Eff	76.32 %	Shut Off Head	60 m	Discharge (mm)	80	125

Tag Number	015	Offer No	EPL-TECH-NTPC-LARA-4519	Prepared By/Checked By		BCB Reddy
				Date		31/05/2024

Note : 1.Pump Performance with ISO-9906-Gr2B 2. NPSHa should be at least 0.5 m higher than NPSHr

Technical matter is subjected to change without prior notice due to intensive Research & Development activities indicated impeller diameter is approximate.

Reference: SCPt 80-420 HA_50_4_A_R01

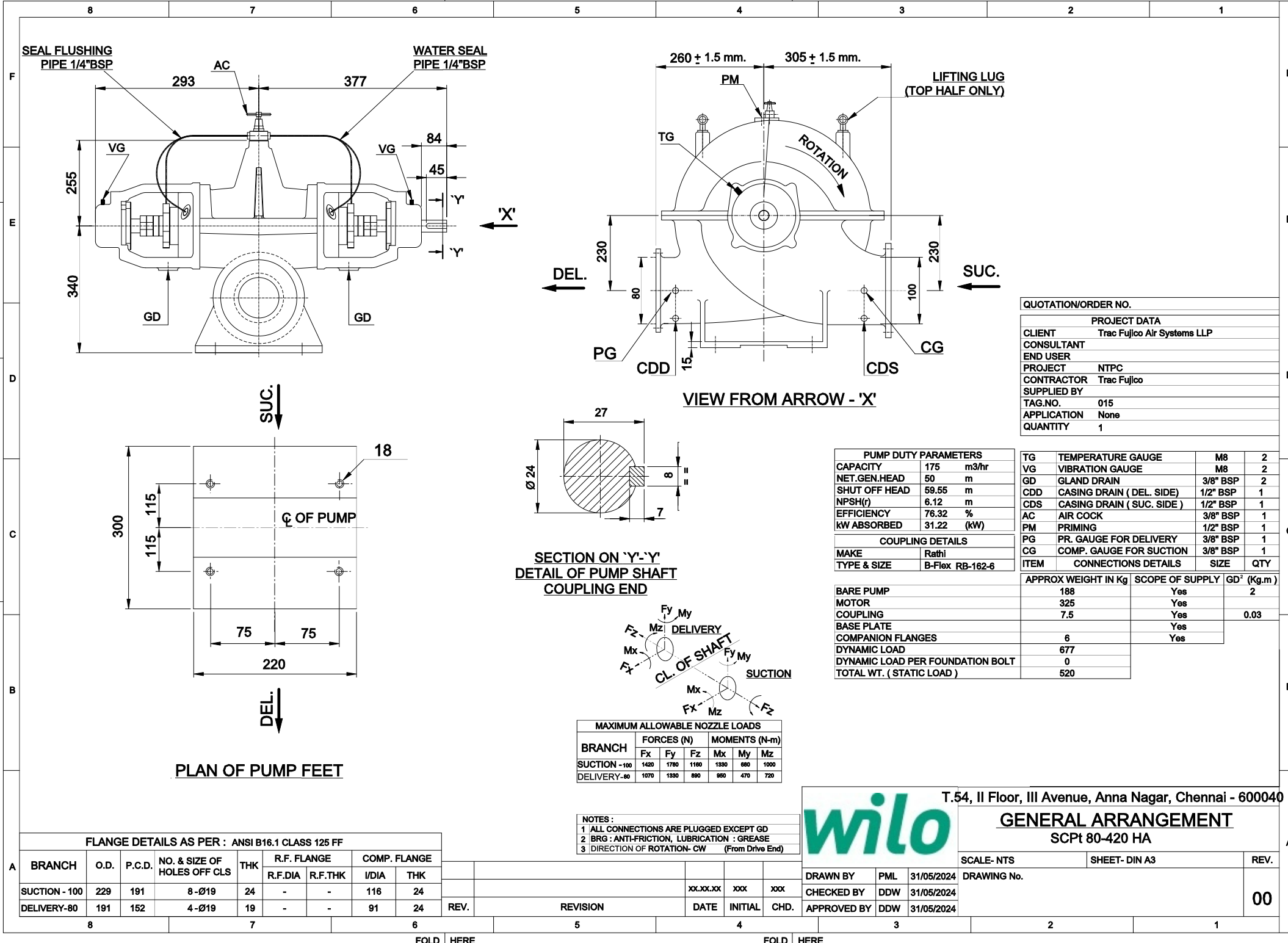
- Please revalidate the prime mover selection with respect to Altitude from sea level and apply correction factors as applicable.

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DIMENSIONS IN MM. EXCEPT WHERE
OTHERWISE STATED.

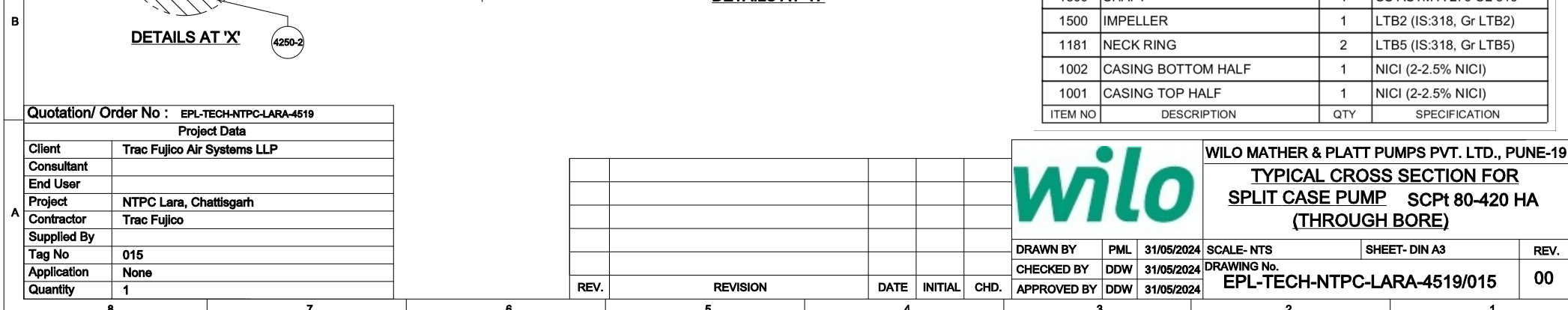
FIRST ANGLE PROJECTION

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4650	FOUR WAY PIECE	1	SS ASTM A 276 CL 304
4250-2	O RING	2	EPDM
4250-1	O RING	2	EPDM
4230	AIR VENT COCK	1	SS ASTM A 276 CL 304
3250	COUPLING KEY	1	BS 970 80M40 (EN8)
3200	IMPELLER KEY	1	BS 970 80M40 (EN8)
3032	SLEEVE NUT (RH)	2	SS ASTM A 276 CL 410
3031	SLEEVE NUT (LH)	2	SS ASTM A 276 CL 410
3010	LOCK NUT	1	SS ASTM A 276 CL 410
2764	BEARING HOUSING (NDE)	1	C.I. (IS:210 Gr FG260)
2761	BEARING HOUSING (DE)	1	C.I. (IS:210 Gr FG260)
2754	BEARING END COVER (NDE)	1	C.I. (IS:210 Gr FG260)
2751	BEARING END COVER (DE)	1	C.I. (IS:210 Gr FG260)
2600	DEEP GROOVE BALL BEARING (6311 2Z)	2	STEEL
2410	GLAND PACKING	6	GRAPHITED COTTON
2404	STUFFING BOX COVER	2	NICI (2-2.5% NICI)
2300	LOGGING RING	2	GLASS FILLED NYLON
2111	SPACER SLEEVE	2	SS ASTM A 276 CL 410
1800	SHAFT	1	SS ASTM A 276 CL 316
1500	IMPELLER	1	LTB2 (IS:318, Gr LTB2)
1181	NECK RING	2	LTB5 (IS:318, Gr LTB5)
1002	CASING BOTTOM HALF	1	NICI (2-2.5% NICI)
1001	CASING TOP HALF	1	NICI (2-2.5% NICI)
ITEM NO	DESCRIPTION	QTY	SPECIFICATION

Quotation/ Order No : EPL-TECH-NTPC-LARA-4519	
Project Data	
Client	Trac Fujico Air Systems LLP
Consultant	
End User	
Project	NTPC Lara, Chattisgarh
Contractor	Trac Fujico
Supplied By	
Tag No	015
Application	None
Quantity	1

REV.	REVISION	DATE	INITIAL	CHD

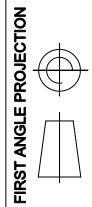


WILO MATHER & PLATT PUMPS PVT. LTD., PUNE-19

**TYPICAL CROSS SECTION FOR
SPLIT CASE PUMP SCpT 80-420 HA
(THROUGH BORE)**

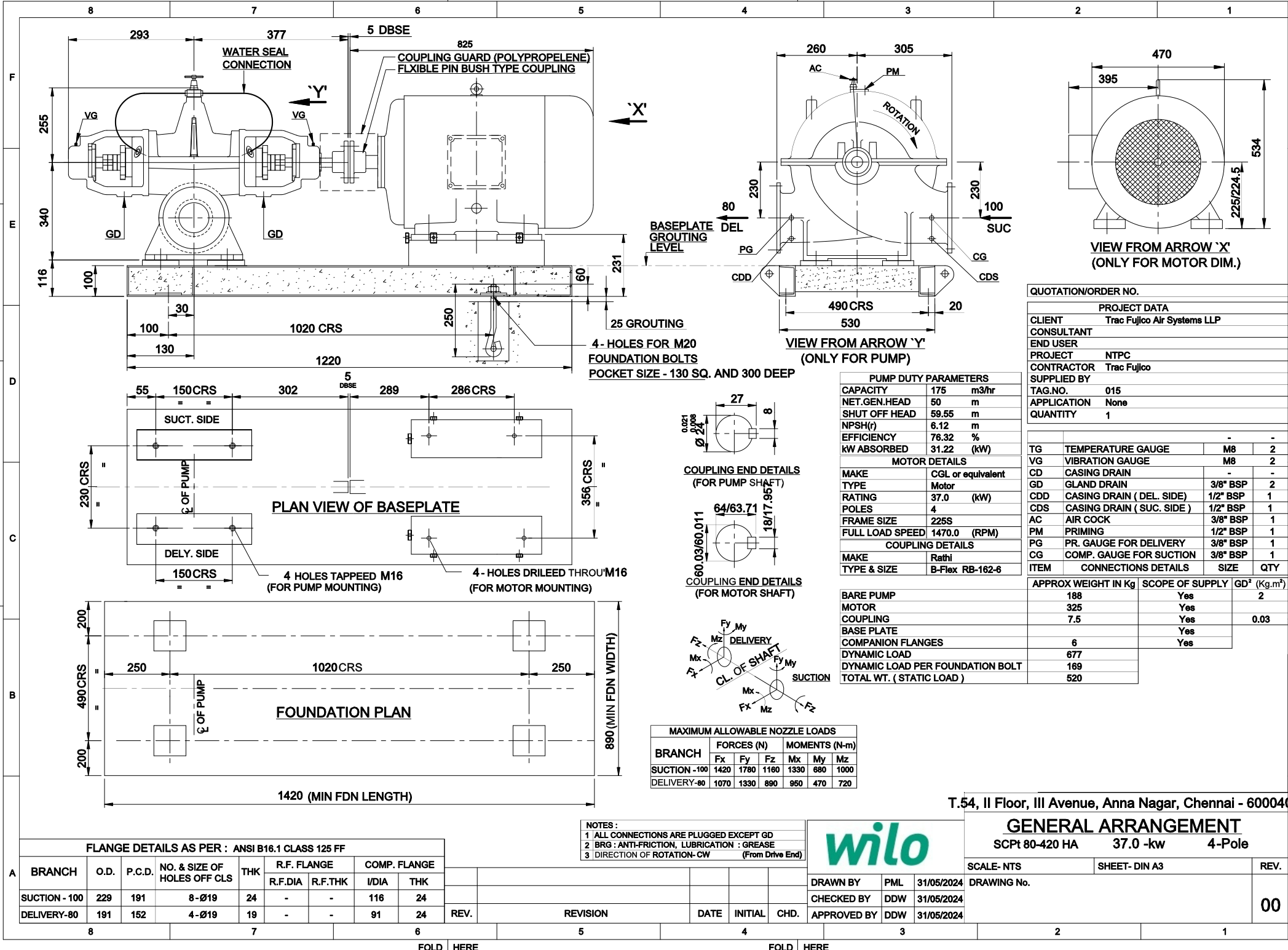
DRAWN BY	PML	31/05/2024	SCALE- NTS	SHEET- DIN A3	REV.
CHECKED BY	DDW	31/05/2024	DRAWING No.		00
APPROVED BY	DDW	31/05/2024	EPL-TECH-NTPC-LARA-4519/015		

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CONTRAVENTION WILL BE PROSECUTED



QUOTATION/ORDER NO.			
PROJECT DATA			
CLIENT	Trac Fujico Air Systems LLP		
CONSULTANT			
END USER			
PROJECT	NTPC		
CONTRACTOR	Trac Fujico		
SUPPLIED BY			
TAG.NO.	015		
APPLICATION	None		
QUANTITY	1		

TG	TEMPERATURE GAUGE	M8	2
VG	VIBRATION GAUGE	M8	2
CD	CASING DRAIN	-	-
GD	GLAND DRAIN	3/8" BSP	2
CDD	CASING DRAIN (DEL. SIDE)	1/2" BSP	1
CDS	CASING DRAIN (SUC. SIDE)	1/2" BSP	1
AC	AIR COCK	3/8" BSP	1
PM	PRIMING	1/2" BSP	1
PG	PR. GAUGE FOR DELIVERY	3/8" BSP	1
CG	COMP. GAUGE FOR SUCTION	3/8" BSP	1

ITEM	CONNECTIONS DETAILS	SIZE	QTY
APPROX WEIGHT IN Kg			
BARE PUMP	188	Yes	2
MOTOR	325	Yes	
COUPLING	7.5	Yes	0.03
BASE PLATE		Yes	
COMPANION FLANGES	6	Yes	
DYNAMIC LOAD	677		
DYNAMIC LOAD PER FOUNDATION BOLT	169		
TOTAL WT. (STATIC LOAD)	520		

PUMP DUTY PARAMETERS		
CAPACITY	175	m3/hr
NET.GEN.HEAD	50	m
SHUT OFF HEAD	59.55	m
NPSH(r)	6.12	m
EFFICIENCY	76.32	%
KW ABSORBED	31.22	(kW)

MOTOR DETAILS		
MAKE	CGL or equivalent	
TYPE	Motor	
RATING	37.0	(kW)
POLES	4	
FRAME SIZE	225S	
FULL LOAD SPEED	1470.0 (RPM)	
COUPLING DETAILS		
MAKE	Rathi	
TYPE & SIZE	B-Flex RB-162-6	

MAXIMUM ALLOWABLE NOZZLE LOADS						
BRANCH	FORCES (N)			MOMENTS (N-m)		
	Fx	Fy	Fz	Mx	My	Mz
SUCTION -100	1420	1780	1160	1330	680	1000
DELIVERY-80	1070	1330	890	950	470	720

NOTES :
1 ALL CONNECTIONS ARE PLUGGED EXCEPT GD
2 BRG : ANTI-FRICTION, LUBRICATION : GREASE
3 DIRECTION OF ROTATION-CW (From Drive End)



T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040

GENERAL ARRANGEMENT

SCPt 80-420 HA 37.0 -kw 4-Pole

SCALE- NTS SHEET- DIN A3 REV.

DRAWING No.

DRAWN BY PML 31/05/2024

CHECKED BY DDW 31/05/2024

APPROVED BY DDW 31/05/2024

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FLANGE DETAILS AS PER : ANSI B16.1 CLASS 125 FF								
BRANCH	O.D.	P.C.D.	NO. & SIZE OF HOLES OFF CLS	THK	R.F. FLANGE		COMP. FLANGE	
					R.F.DIA	R.F.THK	I/DIA	THK
SUCTION - 100	229	191	8-Ø19	24	-	-	116	24
DELIVERY-80	191	152	4-Ø19	19	-	-	91	24

REV.	REVISION	DATE	INITIAL	CHD.



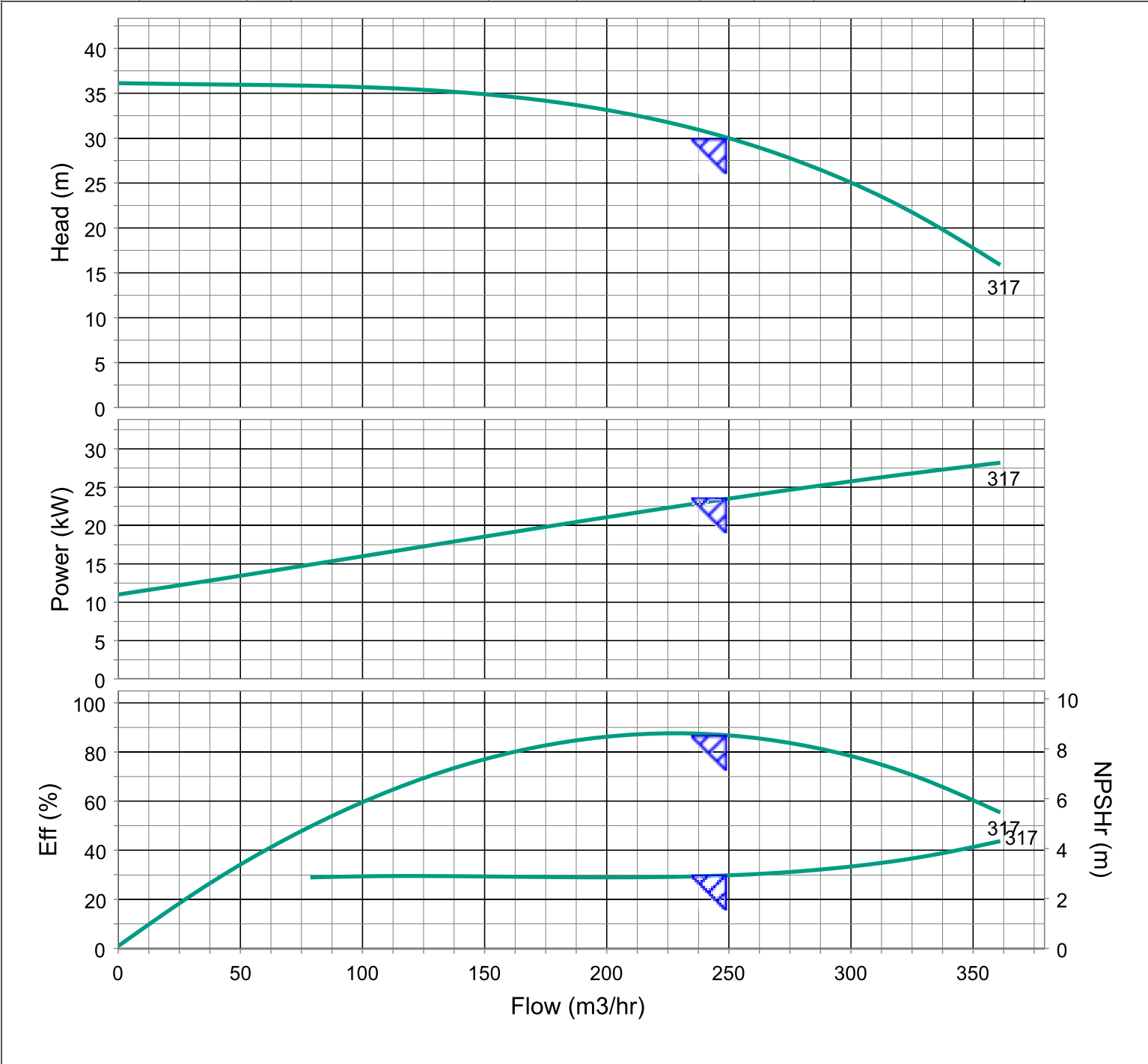
Technical DataSheet

Customer		Trac Fujico Air Systems LLP		Consultant		-			
Project		NTPC Korba		Application		Condensor Pump-Korba			
Pump Model		SCPt 125-330 HA		Reference Curve		SCPt 125-330 HA_50_4_C_R02			
Speed		Frequency		Duty Point :		Suction :		Discharge :	
1460 RPM		50 Hz		Q = 250.0 m3/hr H = 30.0 m		150 mm		125 mm	
Customer Details									
Address		-			Tag Number		016		
Enquiry Date		31/05/2024			Reference:		NTPC-LARA-4519		
Offer Date		31/05/2024			Offer No		EPL-TECH-NTPC-LARA-4519		
Operating Conditions									
Capacity		250.0 m3/hr			Fluid		Water		
Head		30.0 m			Specific Gravity *		1		
NPSHA		-			Temperature		-		
Suction Pressure *		1 bar			Viscosity				
System / Pump in System		Standalone / 1			Solid Size *		-		
Total QTY		1			Frequency		50 Hz		
Performance Data @DP									
Efficiency		86.88 %			NPSHR		2.93 m		
Input		23.51 kW			Shut Off Head		36 m		
Max. Power		28.19 kW			Stage		1		
Speed		1460 RPM			Impeller Dia (Approx)		317 mm		
Max allowable soft solid		8 mm			Pump Performance Std		ISO-9906-Gr2B		
Motor Details									
Motor make		CGL			Mounting		B3		
Series		ND			Eff class		IE2		
Specification		TEFC							
Constructional Features					MOC				
Type of Pump		Split Case Pump			Item Description		Specification		
Impeller Type		Closed			CASING BOTTOM HALF		NICI (2-2.5% NICI)		
Bearing (DE/NDE)		6305 2Z / 6305 2Z			CASING TOP HALF		NICI (2-2.5% NICI)		
Bearing Lubrication		Grease			IMPELLER		LTB2 (IS:318, Gr LTB2)		
Rotation (from coupling End)		CW			NECK RING		LTB5 (IS:318, Gr LTB5)		
Recommended Power (Pole)		30.0 kW (4)			SHAFT		SS ASTM A 276 CL 316		
Shaft Sealing		Gland							
Flange Type		ANSI B16.1 CLASS 125 FF							
Painting		Wilo Green							
Pump GD2		-							
Notes :									
1.Suction Pressure more than Vapour Pressure of fluid.									
2.NPSHA>NPSHR by atleast 0.5m									
3.NPSHR at impeller CenterLine / Inlet.									
4.Fluid is not aggressive towards pump components chemically / physically.									
5. * Customer to confirm.									
6. Please revalidate the prime mover selection with respect to Altitude from sea level and apply correction factors as applicable.									
Technical matter is subjected to change without prior notice due to intensive Research & Development activities									
T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040									



Performance Chart

Customer		Trac Fujico Air Systems LLP				Liquid		Water	
Consultant		-				Specific Gravity		1	
Project		NTPC Korba							
Application		Condensor Pump-Korba							
Speed 1460 RPM	Frequency	Pump Model SCPt 125-330 HA				Solid Size		8	mm
	50 Hz	Flow	250.0 m3/hr	Head	30.0 m	Stage	1		



Input	23.51 kW	NPSHA	-	Size	Pump Nozzle	Recommended
PrimeMover Power	30.0 kW	NPSHR	2.93 m	Suction (mm)	150	250
Eff	86.88 %	Shut Off Head	36 m	Discharge (mm)	125	150

Tag Number	016	Offer No	EPL-TECH-NTPC-LARA-4519	Prepared By/Checked By	BCB Reddy
				Date	31/05/2024

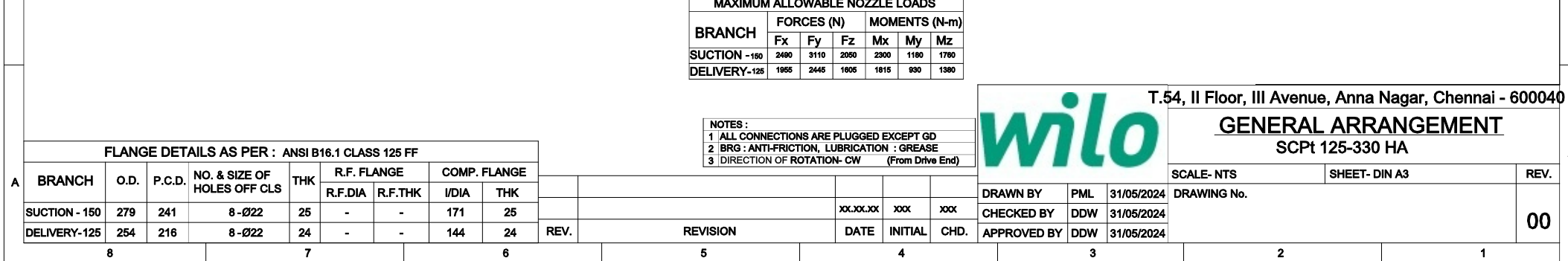
Note : 1.Pump Performance with ISO-9906-Gr2B 2. NPSHa should be at least 0.5 m higher than NPSHr

Technical matter is subjected to change without prior notice due to intensive Research & Development activities indicated impeller diameter is approximate.

Reference: SCPt 125-330 HA_50_4_C_R02

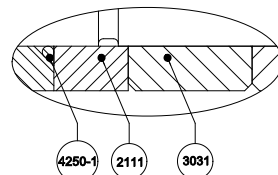
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			T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040		
			<u>GENERAL ARRANGEMENT</u>		
			SCPT 125-330 HA		
			SCALE- NTS SHEET- DIN A3 REV.		
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APPROVED BY	DDW	31/05/2024			
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Quotation/ Order No : EPL-TECH-NTPC-LARA-4519	
Project Data	
Client	Trac Fujico Air Systems LLP
Consultant	
End User	
Project	NTPC Lara, Chattisgarh
Contractor	Trac Fujico
Supplied By	
Tag No	016
Application	None
Quantity	1

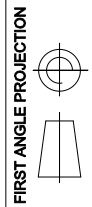
REV.	REVISION	DATE	INITIAL	CHD



WILO MATHER & PLATT PUMPS PVT. LTD., PUNE-19
TYPICAL CROSS SECTION FOR
SPLIT CASE PUMP SCpT 125-330 HA
(THROUGH BORE)

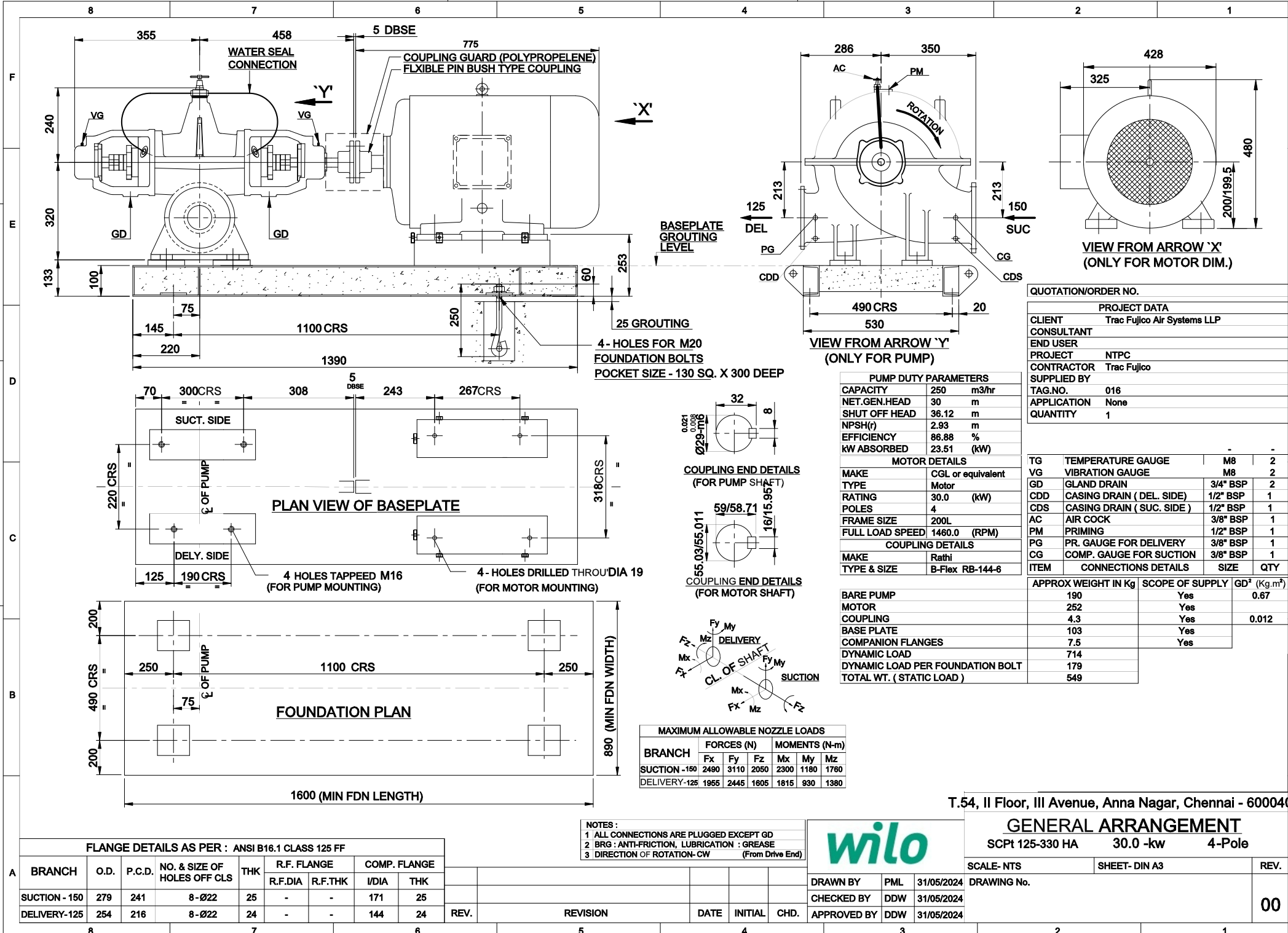
DRAWN BY	PML	31/05/2024	SCALE- NTS	SHEET- DIN A3	REV.
CHECKED BY	DDW	31/05/2024	DRAWING No.		00
APPROVED BY	DDW	31/05/2024	EPL-TECH-NTPC-LARA-4519/016		

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T.54, II Floor, III Avenue, Anna Nagar, Chennai - 600040



A	BRANCH	O.D.	P.C.D.	NO. & SIZE OF HOLES OFF CLS	THK	R.F. FLANGE		COMP. FLANGE						SCALE- NTS				SHEET- DIN A3		REV.			
						R.F.DIA	R.F.THK	I/DIA	THK							DRAWN BY	PML	31/05/2024	DRAWING No.				
SUCTION -150	279	241	8-Ø22	25	-	-	171	25												00			
DELIVERY -125	254	216	8-Ø22	24	-	-	144	24	REV.	REVISION			DATE	INITIAL	CHD.	APPROVED BY	DDW	31/05/2024					
8			7			6			5			4			3			2			1		

wilo

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