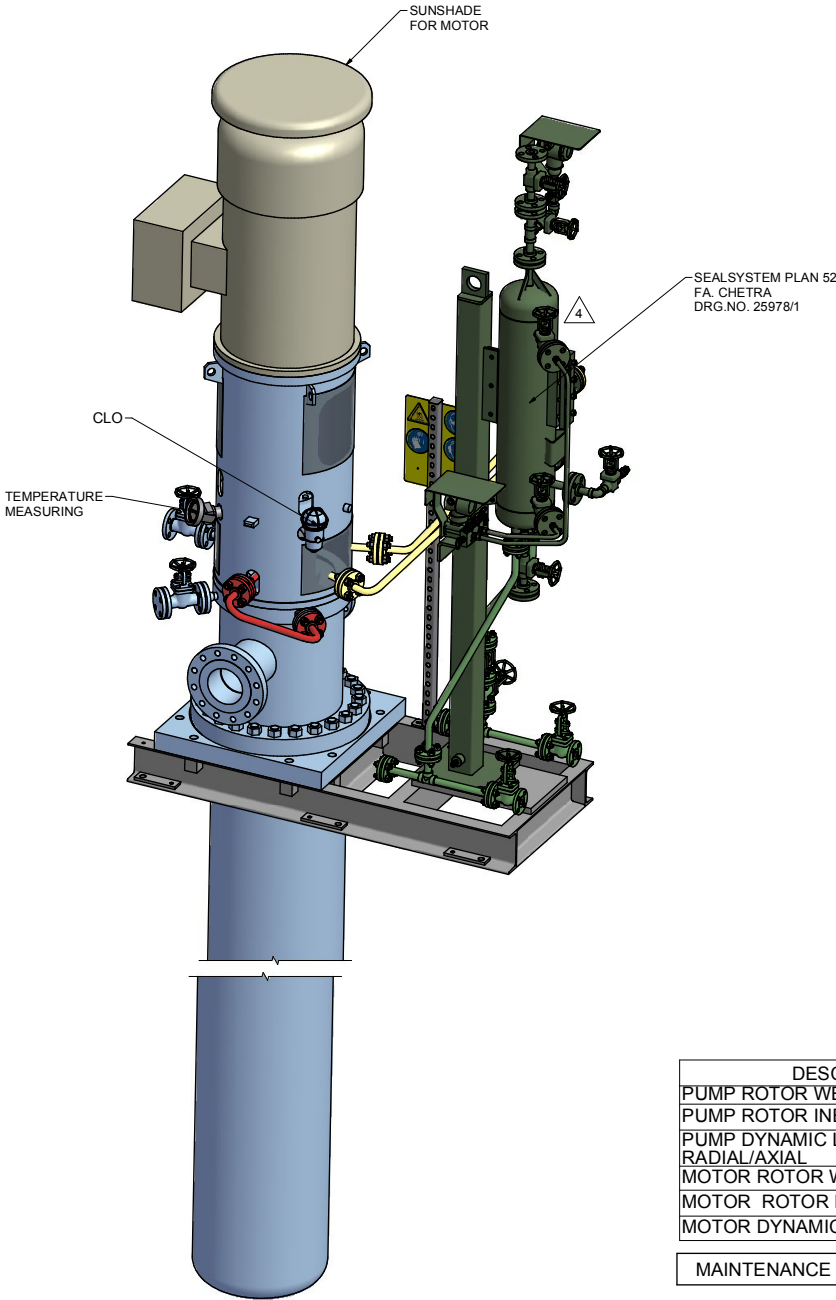



PUMP SPECIFICATIONS	
SIZE & TYPE: TTMC80-230/6	
SPEED: (see MOTOR SPECIFICATIONS)	
ROTATION: CCW (AS VIEWED FROM DRIVER)	
DISCH FLG: 3"	CLASS: 300RF Standard: ASME B16.5
SUCT FLG: 6"	CLASS: 300RF Standard: ASME B16.5
MECH SEAL TYPE: CHETRA TYP 851TB-048	
MECH SEAL DRG: 25509-16-10-P1681A/B API CODE: BDPFP/N	
API PIPING PLANS: 13 + 52	

COUPLING SPECIFICATIONS	
MFR: Metastream	
TYPE: TSKS	SIZE: 0075
COUPLING-GUARD MATERIAL: BRASS	

DRIVER SPECIFICATIONS	
MOTOR: Schorch	
FRAME: KD1280S-AA45P-M ENCLOSURE: ZONE 2,IIB,T3	
kW: 75	SPEED: 2972 rpm
PHASE: 3	VOLTAGE: 400
FURNISHED BY: SULZER CYCLE: 50 Hz	



Cost1	<input type="checkbox"/> Approved: No comment and the document is released for Manufacturing.				
Cost2	<input type="checkbox"/> Approved with comment: Vendor shall correct, review and resubmit the document. The document can be released for Manufacturing if change is accepted.				
Cost3	<input type="checkbox"/> Commented: Vendor shall correct, review and resubmit the document to the site specified. The document shall be released under the Status of "In Transit" only. It cannot be accepted and no manufacturing shall start during the Manufacturing.				
Cost4	<input type="checkbox"/> Not Accepted (Rejected): Vendor shall re-work/re-design/re-specify the contents contents of the document according to the comments/notes for specific it cannot be accepted and no manufacturing shall start during the Manufacturing. Above checking results by EIED shall in no way release Vendor of any liability, obligation and responsibility out of the purchase order and the mutual agreement in writing.				
DWG :  EIED GPR : Signature :					
Only for internal review					
DY	PI	EL	IN	ME	MA
ST	WR	PRE	SA	INV	TL

DESCRIPTION	VALUE
PUMP ROTOR WEIGHT [kg]	277
PUMP ROTOR INERTIA [kg.m²]	0.418
PUMP DYNAMIC LOADS [N] RADIAL/AXIAL	636 / 65
MOTOR ROTOR WEIGHT [kg]	109
MOTOR ROTOR INERTIA [kg.m²]	0.65
MOTOR DYNAMIC LOADS [N]	85

MAINTENANCE WEIGHT PUMP:	1635 kg
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APPROXIMATE WEIGHTS	
PUMP:	2390 kg
PUMP WITHOUT CAN /	1635 kg
CAN:	755 kg
MOTOR:	700 kg
BASEPLATE:	125 kg
AUXILIARY:	150 kg
TOTAL:	3365 kg


CONTRACT DATA	
PURCHASER:	AIOTEC GmbH
USER:	Kangan Petro-Refining Co.
JOB/PROJECT:	Kangan C2 Recovery and Fractionation Plant
CUST. P.O. NO.:	KP-10-00-PS-MA-PO-0003
SERVICE:	PROPANE COOL DOWN PUMP
INSTALLED AT:	KANGAN- ASSALUYEH - IRAN
PUMP OEM:	Sulzer Pumpen (Deutschland) GmbH
SULZER ORDER NO.:	100247188-0090

IDENTIFICATION NUMBERS		
SULZER SERIAL NO.	CUSTOMER TAG NO'S	
	PUMP	DRIVER
583642	10-P-1681 A	10-M-1681 A
583643	10-P-1681 B	10-M-1681 B

<input checked="" type="checkbox"/> CERTIFIED FINAL	DO NOT SCALE. DIMENSIONS: mm
<input type="checkbox"/> CERTIFIED FOR NOZZLE & FOUNDATION ONLY	UNLESS OTHERWISE SPECIFIED TOLERANCES ≤ 500 mm ± 3mm > 500 mm ± 12mm
<input type="checkbox"/> PRELIMINARY ONLY	AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 25

DRAWING CONTENT	
SHEET DESCRIPTION	SHEET NO.
GA ISOMETRIC DATA SHEET	1
FOUNDATION AND NOZZLE	2
CONNECTION LAYOUT	3

04	14.11.17	"R"	For Approval	TR	RS	CH	PL
03	08.08.17	"R"	For Approval	TR	RS	CH	PL
02	19.06.17	"R"	For Approval	TR	RS	CH	PL
01	02.03.17	"R"	For Approval	TR	RS	CH	PL
00	21.12.16	"F"	For Approval	TR	RS	CH	PL
REV.	DATE	Status	Purpose of Issue	PREP'D	CHK'D	APP'D	AUTH'D

KANGAN C2 RECOVERY & FRACTIONATION PLANT		 KANGAN PETRO REFINING CO.
P.O. No.:	KP-10-00-PS-MA-PO-0003	SCALE : 1 : 10

<b>SULZER</b>	 EIED
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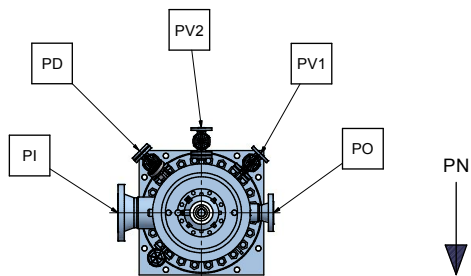
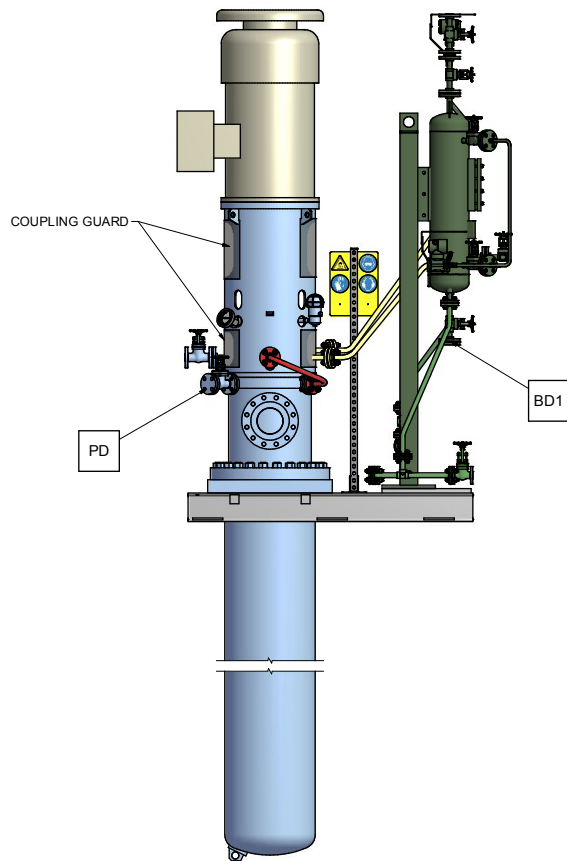
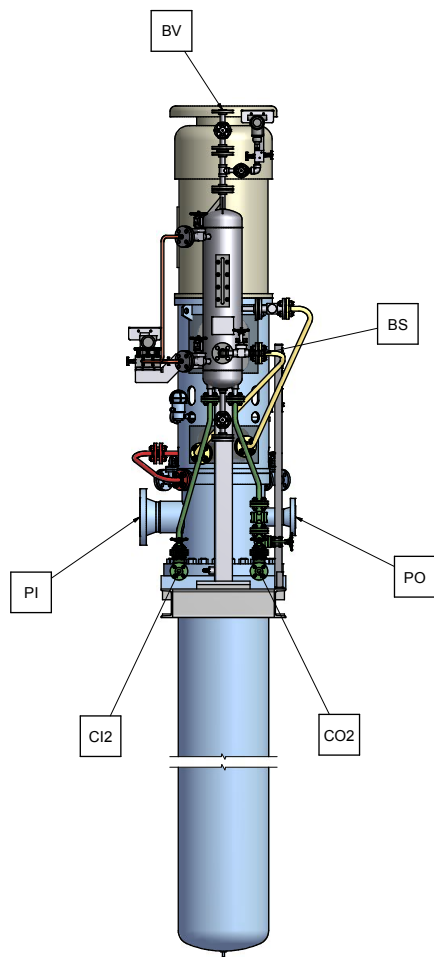
DRAWING TITLE: General Arrangement drawings for Item 10-P-1681 A/B	
DRAWING No.	VP-10-00-MA-0003-0914 SHEET No. 1 of 3 REV. 04

REV. MODIFICATION	MODIFIED	CHECKED	APPROVED
SEP. PARTS LIST: NO	FORMAT: A1	DESIGN GROUP: -	FIRST ANGLE PROJECTION: E
REPLACED BY: -	SUBSTITUTE FOR: -	ORIGINAL SCALE: -	
TTMC 80-230/6	GENERAL ARRANGEMENT GA ISOMETRIC AND DATA SHEET	DRAWN: 14-Dec-2016 T. Ratzel	CHECKED: 14-Dec-2016 R. Scherban
100247188-0090	GENERAL ARRANGEMENT DRAWING	APPROVED:	
<b>SULZER</b>	PART NO. EN	PGA1002471880090-01	1 / 3

- NOTES:
- CAUTION!** CAREFULLY CHECK ALIGNMENT BEFORE STARTING UNIT. ALL HOLES IN FLANGES STRADDLE CENTERLINES. **THE CONNECTION OF PIPES TO THE UNIT HAS TO BE STRESS FREE.**
  - COLORS ARE NOT INTENDED TO REPRESENT "AS SHIPPED" PAINT REQUIREMENTS. THEY ARE FOR QUICK IDENTIFICATION OF PIPING AND EQUIPMENT.
  - PIPING AND EQUIPMENT ARE MODELED REPRESENTATIONS ONLY. ACTUAL LOCATION AND ORIENTATION MAY VARY PER SHOP STANDARDS, UNLESS OTHERWISE DIMENSIONED.
  - THE SUCTION PIPING OR INTAKE DESIGN SHALL MEET THE HYDRAULIC INSTITUTE STANDARDS ANSI / HI 9.8-1998 "PUMP INTAKE DESIGN" REQUIREMENTS.

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NOZZLE ORIENTATION


CONNECTION LEGEND			
ITEM	DESCRIPTION	SIZE	TYPE
PI	PUMP SUCTION NOZZLE	6"	ASME B16.5 300 RF
PO	PUMP DISCHARGE NOZZLE	3"	ASME B16.5 300 RF
PD	PUMP DRAIN WITH GATE VALVE	3/4"	ASME B16.5 300RF / GATE VALVE 300 RF
PV1	PUMP VENT WITH GATE VALVE -SUCTION -PERMANENT VENT	3/4"	ASME B16.5 300 RF / GATE VALVE 300 RF
PV2	PUMP VENT WITH GATE VALVE -DISCHARGE -VENT BEFORE START UP	3/4"	ASME B16.5 300 RF / GATE VALVE 300 RF
CI2	COOLING HEADER - INLET	3/4"	ASME B16.5 150 RF
CO2	COOLING HEADER - OUTLET	3/4"	ASME B16.5 150 RF
BS	PLAN 52 -FILLING CONNECTION	1/2"	NPT-F WITH QUICK COUPLING
BD1	PLAN 52 -DRAIN	3/4"	ASME B16.5 300 RF WITH BLIND FLANGE
BV	PLAN 52 -VENT	3/4"	ASME B16.5 300 RF

CONTRACT DATA	
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JOB/PROJECT:	Kangan C2 Recovery and Fractionation Plant
CUST. P.O. NO.:	KP-10-00-PS-MA-PO-0003
SERVICE:	PROPANE COOL DOWN PUMP
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PUMP OEM:	Sulzer Pumpen (Deutschland) GmbH
SULZER ORDER NO.:	100247188-0090

IDENTIFICATION NUMBERS		
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	PUMP	DRIVER
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583643	10-P-1681 B	10-M-1681 B

<input checked="" type="checkbox"/> CERTIFIED FINAL	DO NOT SCALE. DIMENSIONS: mm
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<input type="checkbox"/> PRELIMINARY ONLY	≤ 500 mm ± 3mm
	> 500 mm ± 12mm
	AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 25

04	14.11.17	"R"	For Approval	TR	RS	CH	PL
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01	02.03.17	"R"	For Approval	TR	RS	CH	PL
00	21.12.16	"F"	For Approval	TR	RS	CH	PL
REV.	DATE	Status	Purpose of Issue	PREP.	CHK'D.	APP'D.	AUTH'D.

KANGAN C2 RECOVERY & FRACTIONATION PLANT		 KANGAN PETRO REFINING CO.
P.O. No.:	KP-10-00-PS-MA-PO-0003	SCALE : 1 : 15

<b>SULZER</b>	
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DRAWING TITLE: General Arrangement drawings for Item 10-P-1681 A/B			
DRAWING No.	VP-10-00-MA-0003-0914	SHEET No.	3 of 3 REV. 04

REV. MODIFICATION	NO	FORMAT: A1	DESIGN GROUP:	FIRST ANGLE PROJECTION
SEPARATE PARTS LIST:	NO	SUBSTITUTE FOR:	ORIGINAL SCALE:	
REPLACED BY:				
TTMC 80-230/6	GENERAL ARRANGEMENT CONNECTION LAYOUT		DRAWN:	14-Dec-2016 T. Ratzel
100247188-0090	GENERAL ARRANGEMENT DRAWING		CHECKED:	14-Dec-2016 R. Scherban
<b>SULZER</b>	PART NO.	EN	PGA1002471880090-01	3 / 3