

中华人民共和国
工程设计综合资质
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VENT TO RECONDENSER
4 PCS-10.11-3019S

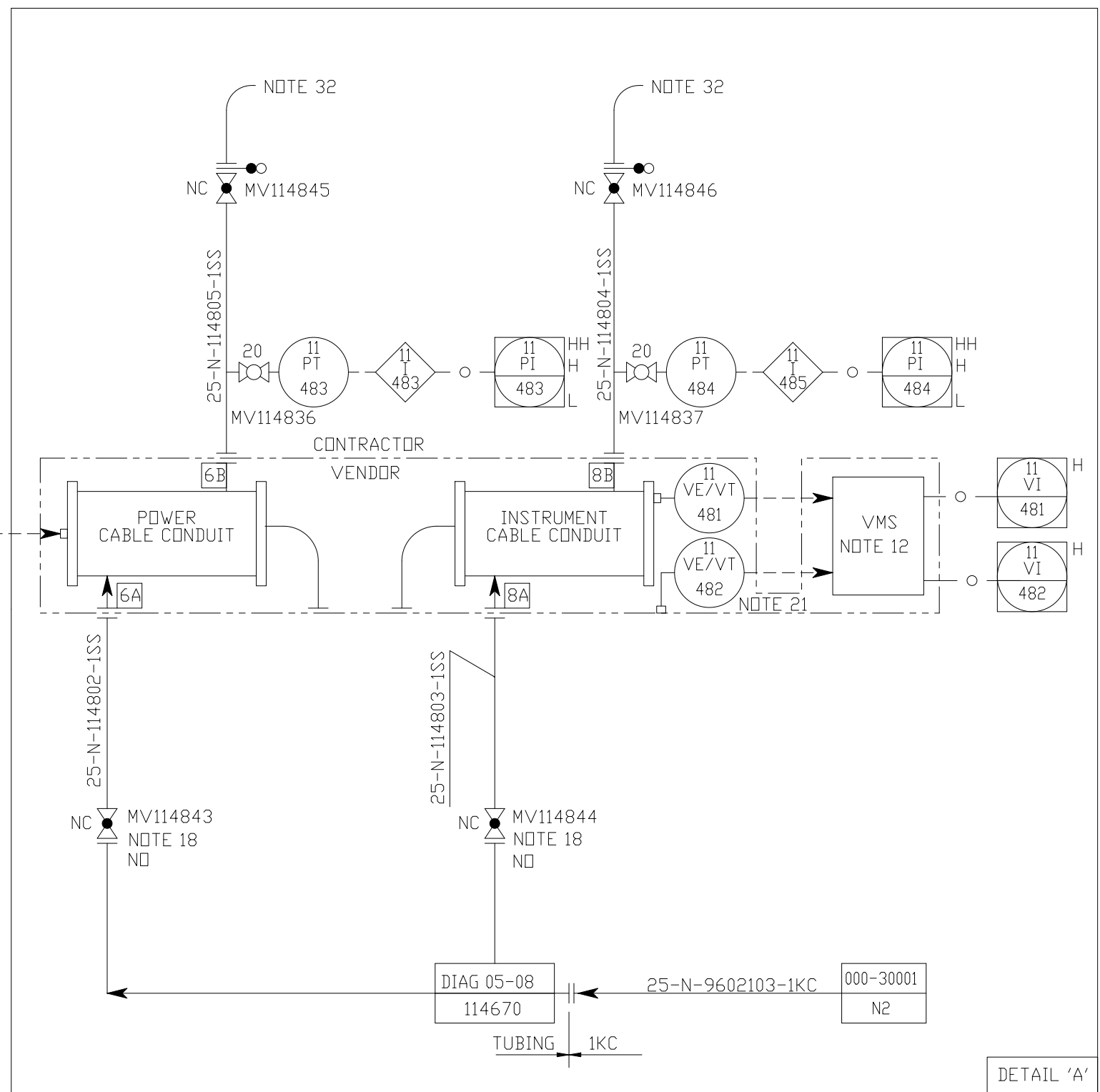
KICKBACK TO RECONDENSER
3 PCS-10.11-3019S

TO HP DRAIN
7 PCS-10.11-3019S

TO HP SENDUT
2 PCS-10.11-3019S

- NOTES:
- FOR GENERAL NOTES AND SYMBOLS SEE DWG NOS. T653010 110-PCS-10.11-20000 TO 20007.
 - SEE DWG NO. T653010 110-PCS-10.11-20004 FOR DETAILS OF PUMP SUCTION PIPING LAYOUT.
 - RTD POSITIONED AT VERTICAL INTERVALS ALONG THE PUMP CAN TO MONITOR COOLDOWN.
 - BYPASS VALVE IS REQUIRED TO REGULATE COOLDOWN FLOW TO BE TRIMMED AND LOCKED INTO POSITION DURING COMMISSIONING.
 - LOCATE MINIMUM DISTANCE FROM PUMP CAN, CONSISTENT WITH STRAIGHT LENGTH REQUIREMENTS.
 - LT BY VENDOR AS LOOSE PART.
 - TW IS TO FACILITATE DRAINING OF THE PUMP.
 - LOCATED AT MINIMUM DISTANCE FROM THE HEADER.
 - FOR PUMP FILLING AND COOL DOWN, FLOWRATE ADJUSTED BY GLOBE VALVE.
 - VIBRATION MONITORING EQUIPMENT ONE FOR ALL CRYOGENIC PUMPS (LP AND HP) SUPPLIED BY PUMP VENDOR, READOUT IN TECHNICAL ROOM CONTINUOUSLY SHOWING ALL PUMPS.
 - INSTALLED NEAR VALVE MV114803.
 - TO BE READABLE FROM LOCAL START/STOP COMMAND.
 - NO LOW LEVEL (LAL-11481A) IN PUMP CAN IS A PERMISSIVE TO START CONDITION.
 - CHECK VALVES SHALL BE OF DIFFERENT TYPE: MV114809 DUAL PLATE CHECK VALVE MV114808 SWING CHECK VALVE
 - PIPING & INSTRUMENTATION ARRANGEMENT TO ALLOW FOR PUMP REMOVAL FROM CAN.
 - LINES SUPPLY NITROGEN TO THE CABLE CONDUCTS FROM UTILITY STATION. THE PRIMARY PURPOSE IS TO PREVENT MIGRATION OF NATURAL GAS THROUGH THE ELECTRIC CABLES FROM THE SUBMERGED MOTORS OF THE HP SENDOUT PUMPS (SEE DETAIL 'A').
 - NO ADDITIONAL XV IS REQUIRED BASED ON INSTRUMENT LOOP SIL CALCULATION DDC NO. T653010-HDN-INS-10.05-10004.
 - POWER CABLE TO JUNCTION BOX (SUPPLY BY PUMP VENDOR).
 - RADIAL VIBRATION PROBES (SUPPLY BY VENDOR) ONE LOCATED ON PUMP CAN (VE-11482).

- VALVE TO BE OPEN FOR PUMP DISCHARGE COOLING ON LP SIDE WHEN PUMP IS STOPPED (IN STAND BY MODE)
- FALL IS INHIBITED DURING PUMP START-UP SEQUENCE AND ENABLED AT THE END OF START-UP SEQUENCE.
- POSITIVE ISOLATION ON HP PUMP CAN NOZZLE 1 ENSURED BY REMOVING OF SP-114801 AND INSTALLATION OF BLIND FLANGES.
- VALVE IS LO BECAUSE INVOLVED IN SURGE PROTECTION.
- ECCENTRIC REDUCER BOTTOM FLAT.
- VIBRATION MONITORIN FOR CRYOGENIC PUMPS, CABINET GENERAL ALARM IS XA-11481.
- TRV OUTLET RATING IS 300#.
- VENT DISCHARGE TO ATMOSPHERE AT SAFE LOCATION AND SHALL BE GOOSE TYPE WITH 45° CUT AND HAVE 8mm WEEP HOLE AT LOW POINT.
- INTERLOCKS WILL PROHIBIT SIMULTANEOUS OPENING OF BOTH VALVES, VALVE TO HP SENDOUT HEADER NORMALLY OPEN.



CONNECTIONS RATINGS	
1	300LBS
2	900LBS
3	300LBS
6A/B	150LBS
8A/B	150LBS
9	300LBS
10	300LBS

P-11051
HP SENDOUT PUMP
CAPACITY: 180t/hr
DESIGN PRESSURE PUMP: 13.65MPa_g
DESIGN PRESSURE PUMP CAN: 1.89MPa_g
DESIGN TEMP: -170 / +60°C

设计 DESIGN	校核 CHECK	审核 REVIEW	审批 APPROVE
2024.12.10	2025.03.12		

施工图	2023.12.24	薛征斌		朱汉威	袁文	
施工图	2024.12.10	薛征斌		朱汉威	袁文	
设计	2025.03.12	薛征斌	制图	朱汉威	袁文	审核
版次	说明	日期	设计	制图	校核	审核
DESCRIPTION	DATE	DESIGN	DRAW	CHECK	REVIEW	APPROVE
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LNG高压输出泵 (P-11051) 管道及仪表流程图 LNG HIGH PRESSURE OUTPUT PUMP (P-11051) PIPING AND INSTRUMENTATION DIAGRAM			项目名称 PROJECT			接收站可靠性改造项目 TRM Project
设计阶段 UNIT			工艺装置 Process Unit			
设计阶段 PHASE			AS-BUILT DRAWING			
比例 SCALE	1: 00	第 1 张 SHEET	共 1 张 TOT.	图号 DWG NO.	T23008-110-PS07-15	