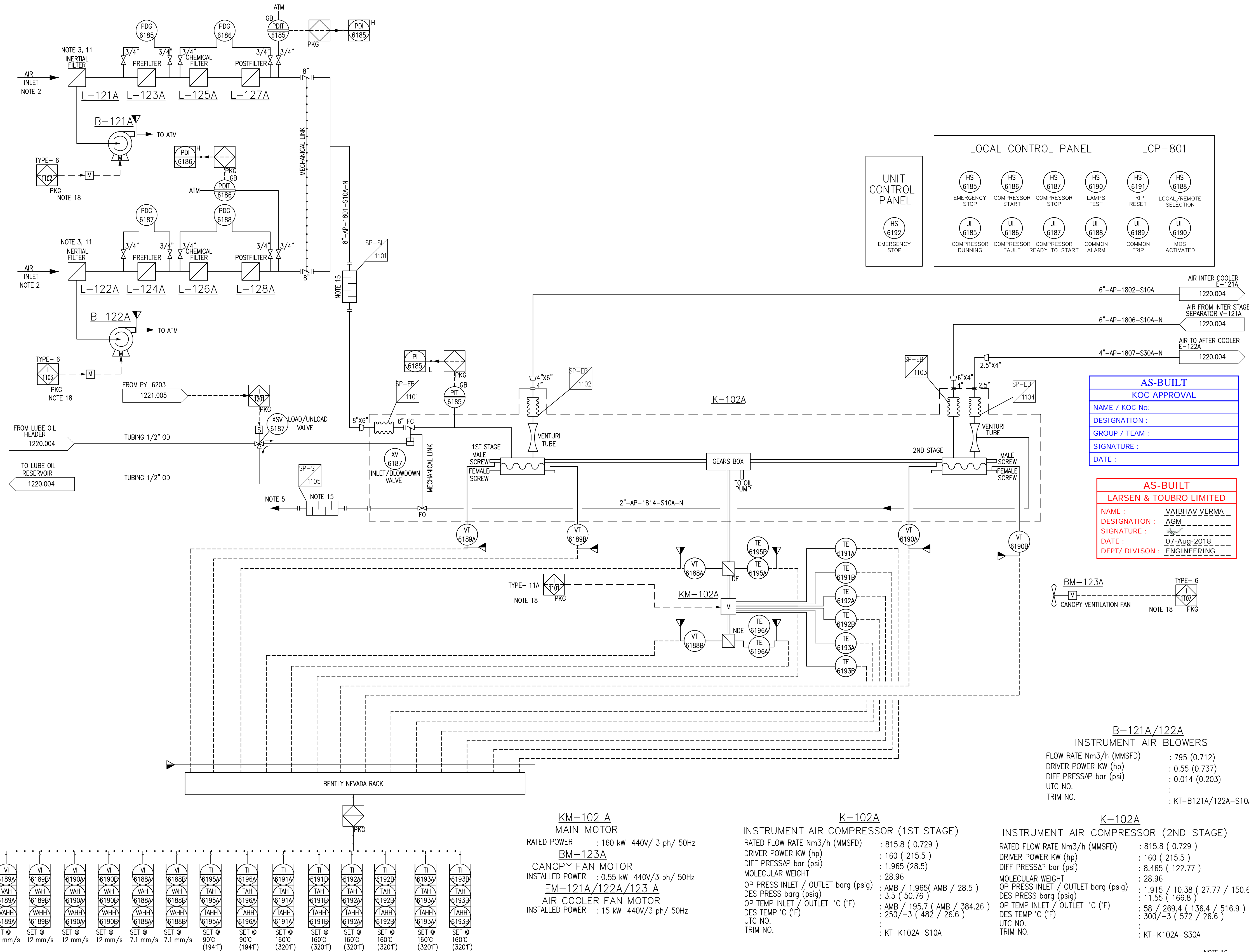


L-121A/122A INTERIAL FILTERS	L-125A/126A CHEMICAL FILTERS	L-123A/124A PRE FILTERS	L-127A/128A POST FILTERS
CAPACITY Nm3/h (MMSFD) : 815.8 ( 0.729 )	CAPACITY Nm3/h (MMSFD) : 815.8 ( 0.729 )	CAPACITY Nm3/h (MMSFD) : 815.8 ( 0.729 )	CAPACITY Nm3/h (MMSFD) : 815.8 ( 0.729 )
ID mm (ft.-in) : N/A	ID mm (ft.-in) : N/A	ID mm (ft.-in) : N/A	ID mm (ft.-in) : N/A
LENGTH /T mm (ft.-in) : N/A	LENGTH /T mm (ft.-in) : N/A	LENGTH /T mm (ft.-in) : N/A	LENGTH /T mm (ft.-in) : N/A
OP PRESS / DES PRESSURE barg (psig) : ATM / 0.5 ( 7.25 )	OP PRESS / DES PRESSURE barg (psig) : ATM / 0.5 ( 7.25 )	OP PRESS / DES PRESSURE barg (psig) : ATM / 0.5 ( 7.25 )	OP PRESS / DES PRESSURE barg (psig) : ATM / 0.5 ( 7.25 )
OP TEMP / DESIGN TEMP °C (°F) : AMB / 55 / -3 ( AMB / 131 / 26.6 )	OP TEMP / DESIGN TEMP °C (°F) : AMB / 55 / -3 ( AMB / 131 / 26.6 )	OP TEMP / DESIGN TEMP °C (°F) : AMB / 55 / -3 ( AMB / 131 / 26.6 )	OP TEMP / DESIGN TEMP °C (°F) : AMB / 55 / -3 ( AMB / 131 / 26.6 )
UTC NO. : L121A/122A-S10A	UTC NO. : L125A/126A-S10A	UTC NO. : L123A/124A-S10A	UTC NO. : L127A/128A-S10A
TRIM NO. : L121A/122A-S10A	TRIM NO. : L125A/126A-S10A	TRIM NO. : L123A/124A-S10A	TRIM NO. : L127A/128A-S10A

NOTE 16,



NOTE 16,

## GENERAL NOTES:

- FOR STANDARD SYMBOLS AND NOMENCLATURE SEE DRAWINGS 50489-530-020-PID-1104.001 & .002.
  - ALL EQUIPMENT NUMBERS SHOWN ON THIS P&ID ARE PRECEDED BY 530-.
  - ALL INSTRUMENT NUMBERS SHOWN ON THIS P&ID ARE PRECEDED BY 030-.
  - FOR TYPICAL INSTRUMENT CONNECTION, SBOV, XY, MOV & ESSV DETAILS SEE DRAWINGS 50489-530-020-PID-1106.001, .002, .003, .004, .005, .006 & .007.
  - FOR MISCELLANEOUS PIPING TYPICAL VALVING, DRAINAGE & GENERAL ARRANGEMENT OF LEVEL INSTRUMENTS, PUMPS, STRAINERS & CONTROL VALVES SEE DRAWINGS 50489-530-020-PID-1108.001 TO 1108.010.
  - DRAWING NUMBERS SHOWN IN P&ID CONTINUATION BOXES ARE ABBREVIATED SHOWING DRAWING SEQUENTIAL NUMBERS ONLY. THE FULL FORM OF THE DRAWING NUMBER IS 50489-530-020-PID-XXXX.SHT.NO.
  - FOR MATERIAL SELECTION DIAGRAM SEE DRAWINGS 50489-530-020-MSD-1001.001 TO 1023.
  - DETAIL NUMBERING FOR CI, SC, CC & CP SEE DRAWING 50489-530-020-PID-1108.003.
  - PAINTING & COATING ARE IN ACCORDANCE WITH KOC-P-001.
  - LOW POINT DRAIN & HIGH POINT VENT ARE INDICATED IN P&ID.
  - FOR CAUSE & EFFECT REFER DOC. NO. 50489-530-020-PHL-1009.
  - FOR ALARM VALUES REFER DOC. NO. 50489-530-020-SUM-1006.
- NOTES:**
- ALL THE DRAINS FROM THE COMPRESSOR PACKAGE/VESSELS ARE COMBINED INTO A COMMON HEADER AND ROUTED TO THE NEAREST SWALE/SOAKAWAY.
  - AIR INTAKE FILTER MOUNTED AT SAFE LOCATION, AWAY FROM HYDROCARBONS.
  - AIR INTAKE IS CAPABLE OF REJECTING SAND, 100 % REMOVAL OF ALL PARTICLES LARGER THAN 1 MICRON.
  - PACKAGE INCLUDES AFTER/INTERCOOLERS, MOISTURE SEPARATORS AND ALL NECESSARY INSTRUMENTATION AND CONTROLS. ALL COOLING BY AMBIENT AIR.
  - VENT TO SAFE LOCATION.
  - INSTRUMENT AIR COMPRESSORS ARE ALSO ON EMERGENCY POWER SUPPLY.
  - DELETED.
  - THE MASTER CONTROL MAINTAINS TWO COMPRESSOR RUNNING AND ONE IN STANDBY (3X50%) WHEN ONE OF THE TWO COMPRESSOR RUNNING TRIPS, THE MASTER CONTROLLER STARTS THE STANDBY COMPRESSOR. FOR MORE INFORMATIONS REFER, LOADING/UNLOADING OPERATIONS AS DESCRIBED IN DOC." PROCESS AND CONTROL PHILOSOPHY FOR INSTRUMENT AIR COMPRESSOR AND DRYER PACKAGE" 50489-530-020-00048-PHL-V001.
  - DELETED.
  - PROVIDED H2S DETECTOR AT AIR INTAKE FILTER.
  - INLET FILTERS ARE COMPOSED BY FOUR FILTRATION STAGES (INERTIAL FILTER IS INERTIAL GRID WITH AIR BLOWER FOR THE EXTRACTION OF SAND; PREFILTER IS A POCKET FILTER FOR FURTHER SAND REMOVAL; CHEMICAL FILTER IS A MODULE FOR H2S REMOVAL AND POSTFILTER IS GLASS MICROFIBER FILTER FOR LAST PARTICLE REMOVAL). THE FILTERS WORK WITH 2X100% LOGIC. THE COMPRESSOR USES THE MAIN DRIVE MOTOR FOR BOTH STAGES OF COMPRESSION AND FOR THE LUBE OIL PUMP.
  - THE COMPRESSOR USES THE MAIN DRIVE MOTOR FOR BOTH STAGES OF COMPRESSION AND FOR THE LUBE OIL PUMP.
  - DELETED.
  - DELETED.
  - THESE ARE THE IN-LINE SILENCERS.
  - FOR CONTINUATION, SEE DRAWING 50489-530-020-PID-1220.004.
  - FOR SET POINTS OF ALARM, REFER TO VENDOR DOCUMENT "50489-530-020-00048-LST-V002 ALARM & TRIP SET-POINT SUMMARY FOR INSTRUMENT AIR COMPRESSOR AND DRYER PACKAGE"
  - FOR MORE DETAIL, REFER 50489-530-020-PID-1220.016.
  - PACKAGE LOGIC IS IMPLEMENTED IN PACKAGE PLC. ALL RELEVANT SIGNALS ARE TRANSFERRED TO DCS FOR SMOOTH OPERATION FROM DCS.
  - MOTOR WINDING RTDS ARE SIMPLEX TYPE, WHILE BEARING RTDS ARE DUPLEX TYPE.
  - VENDOR PID NO: 50489-530-020-00048-PID-V001 SHEET 1 OF 3.

ZO	ISSUED FOR AS-BUILT	HSH/ABY	AKG	SRA	RAK	07.08.18
O	ISSUED FOR CONSTRUCTION	HSH/ABY	AKG	SRA	RAK	10.06.16
D	ISSUED INCORPORATED CLIENT COMMENTS	PAK/ABY	AKG	SRA	RAK	13.05.16
C	ISSUED INCORPORATED CLIENT COMMENTS	JSI/ABY	AKG	SRA	RAK	17.10.15
OC	ISSUED INCORPORATED CLIENT COMMENTS	BAK/VSA	AKG	SRA	RAK	30.05.15
B	ISSUED INCORPORATED CLIENT COMMENTS	BAK/VSA	AKG	SRA	RAK	13.02.15
A	ISSUED FOR APPROVAL	BAK/VSA	AKG	SRA	RAK	29.11.14
REV.	DESCRIPTION	DRAWN	CHECKED	HOD	PEM	DATE

## CONTRACTOR REVISION

**KUWAIT OIL CO. K. S. C.**

**شركة نفط الكويت ش.م.ك.**

إحدى شركات مؤسسة الكويت للتقانة  
A Subsidiary of Kuwait Petroleum Corporation

CONTRACTOR DETAILS:-

**LARSEN & TOUBRO LIMITED FARIDABAD**

PROJECT TITLE:-

**NEW GATHERING CENTRE GC-30 IN NORTH KUWAIT**

DOCUMENT TITLE:-			
PIPING & INSTRUMENTATION DIAGRAM INSTRUMENT AIR COMPRESSOR (K-102A)			
PROJECT NO.	DRAWING NO.	REV.	REV.
EF1902	CONTRACTOR DRG. NO.	REV.	KOC DRG. NO.
	50489-530-020-PID-1220.001	Z0	
	SHEET NO. 1 OF 16		
	COMPANY DRG. NO.	REV.	
EF1902-530-DCO-PID-0220.001	A3		
SHEET NO.			