PETROBRAS	**DATA SHEET**	No. I-FD-3A17.01-1231-854-1J5-001	
	CLIENT: *BS/ATP-IMI/OP-PMXL*		SHEET 1 of 7
	JOB: *PROJETO COMPLEMENTAR PMXL-1*		
	AREA: *1231 - PRIMARY PROCESSING UNIT*		
	TITLE: **MACHINERY PROTECTION SYSTEM FOR TURBOCOMPRESSOR – UC-1231002**		BS/PCM/PROJDP
			INTERNAL

INDEX OF REVISIONS

REV.	DESCRIPTION AND/OR REVISED SHEETS
0	**ORIGINAL ISSUE**

	REV. 0	REV. A	REV. B	REV. C	REV. D	REV. E	REV. F	REV. G	REV. H
DATE	10/31/2025								
EXECUTION	Note 4								
CHECK	U32A								
APPROVAL	BEGS								

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PETROBRAS	DATA SHEET	No. I-FD-3A17.01-1231-854-1J5-001	REV. 0
	BS/ATP-IMI/OP-PMXL		SHEET: 2 of 7
	TITLE: MACHINERY PROTECTION SYSTEM FOR TURBOCOMPRESSOR UC-1231002		BS/PCM/PROJDP
			INTERNAL

APPLICABLE TO:	☒ PROPOSAL	☐ PURCHASE	☐ AS BUILT	
FOR:	**E&P**	UNIT:	**Top deck – M04**	
SITE:	**BS/ATP-IMI/OP-PMXL**	SERVICE:	**TURBOCOMPRESSOR PROTECTION SYSTEM**	
No. REQ / TAG:	**SEE I-ET-3A17.01-1231-321-1J5-001**	MANUFACTURER:		
MODEL:		VENDOR:		
SIZE / TYPE:		MAIN EQUIPMENT:	**CENTRIFUGAL COMPRESSOR / GAS TURBINE**	
SERIAL No.		MANUFACTURER No.		

MACHINERY TRAIN COMPONENTS

NUMBER OF:

☐ ___ PUMPS	☐ ___	ROTARY COMPRESSOR	
☐ ___ STEAM TURBINES	☒ 1	GEAR UNITS	
☒ 1 GAS TURBINES	☐ ___	ELETRIC MOTORS	
☒ 1 CENT. COMPRESSOR	☐ ___	ELETRIC GENERATORS	
☐ ___ RECIP. COMPRESSOR	☐		

SCOPE OF RESPONSIBILITIES

☒ APPENDIX B[a]	**PACKAGER**
☒ FINAL INSTALLATION	**PACKAGER**
☒ MONITOR SYSTEM	**PACKAGER**
☒ SIGNAL CABLES	**PACKAGER**
☒ TRANSDUCERS & SENSORS	**PACKAGER**
☒ SYSTEM PERFORMANCE	**PACKAGER**
☒ SYSTEM DESIGN	**PACKAGER**
☒ APPENDIX F REQUIREMENTS[a]	**PACKAGER**

SCOPE OF SUPPLY

☒ TRANSDUCERS	**PACKAGER**
☒ SENSORS	**PACKAGER**
☒ MONITOR SYSTEMS	**PACKAGER**

SITE DATA *[NOTE 2]*

TEMP. (DRY BULB), ºC NORM. ___ MAX. ___ MIN. ___

TEMP. (WET BULB), ºC NORM. ___ MAX. ___ MIN. ___

RELATIVE HUMIDITY, %: ___

☐ WINTERIZATION REQUIRED ☒ TROPICALIZATION REQUIRED

MONITOR SYSTEMS ☒ INDOORS ☐ OUTDOORS

UNUSUAL CONDITIONS ☐ FUMES

☒ MARINE ENVIRONMENT ☐ DUST

☐ OTHER (DESCRIBE) ___

ELECTRICAL EQUIPMENT HAZARD CLASS

CLASS ___ GROUP ___ ZONE ___

☐ RADIO FREQUENCY INTERFERENCE ___

OPERATING TEMPERATURE RANGE[a]

☐ STANDARD, ALL COMPONENTS

☐ NONSTANDARD REQUIREMENTS

☐ PROBE & EXTENSION CABLE	FROM ___	TO ___	ºC
☐ OSCILLATOR-DEMODULATOR	FROM ___	TO ___	ºC
☐ TEMP. SENSOR & LEAD	FROM ___	TO ___	ºC
☐ MONITOR AND POWER SUPPLY	FROM ___	TO ___	ºC
☐ ACCELEROMETER	FROM ___	TO ___	ºC
☐ CHARGE AMPLIFIER	FROM ___	TO ___	ºC

REMARKS:

[a] PACKAGER shall fill in worksheets and submit to PURCHASER approval.

.

OPERATING ENVIRONMENT

☐ STANDARD COMPONENTS ___

☐ SPECIFIED CHEMICALS ___

☐ SHOCK ___

PROBE DATA

☒ STANDARD (7.6 - 8.3 mm TIP DIA. / ⅜"-24-UNF-2A THREADS / 1 METER INTEGRAL CABLE / REVERSE MOUNT)

☐ OPTIONAL PROBES WITH THE FOLLOWING STD OPTIONS

- ☐ 7.6 - 8.3 mm TIP DIA. / ⅜"-24-UNF-2A ENGLISH THREADS
- ☐ 4.8 - 5.3 mm TIP DIA. / ¼"-28-UNF-2A ENGLISH THREADS
- ☐ 7.6 - 8.3 mm TIP DIA. / M10 x 1 METRIC THREADS
- ☐ 4.8 - 5.3 mm TIP DIA. / M8 x 1 METRIC THREADS
- ☐ LENGTHS OTHER THAN APPROXIMATELY 25 mm
- ☐ FLEXIBLE STAINLESS-STEEL ARMORING ATTACHED TO THE PROBE BODY AND EXTENDING TO WITHIN 100 mm OF THE CONNECTOR

☒ STANDARD MAGNETIC SPEED SENSOR

☐ OTHER

___

___

___

___

☒ PROBE MOUNTING IN REMOVABLE HOLDERS (STD)

TRANSDUSCER SYSTEM

☒ CONNECTORS MFR SAME AS PROBE MFR

☒ EXTENSION CABLE MFR SAME AS PROBE MFR

☒ OSCILATOR-DEMODULATOR MFR SAME AS PROBE MFR

☒ SIGNAL CABLE MFR SAME AS PROBE MFR

☒ PROBE MFR SAME AS MONITOR MFR

NUMBER OF PROBES IN TRAIN[a] *[NOTE 3]*

☐ STANDARD COMPLEMENT (APPENDIX ___)

☐ NONSTANDARD COMPLEMENT REQUIRED

PRIMARY RADIAL	
SPARE RADIAL	
PRIMARY AXIAL	
SPARE AXIAL	
PHASE REFERENCE	
SPEED INDICATING	
OVERSPEED SENSING	
SPARE OVERSPEED SENSING	
ROD DROP	

PROBE ARRANGEMENT[a] *[NOTE 3]*

RADIAL TRANSDUCERS

☒ STANDARD ARRANGEMENT

☐ DEVIATION FROM STD RADIAL PROBE ARR. REQUIRED:

___

___

___

PROBE ARRANGEMENT (CONT.)

AXIAL TRANSDUCERS

☒ STANDARD SHAFT END OR INTEGRAL AXIAL SURFACE

☐ OPT. ONE PROBE ON SHAFT & ONE PROBE ON INTEGRAL THRUST COLLAR

☐ OTHER: _____

☐ PROBES FACING ☐ TOWARD ☐ BACKWARD ACT. THRUST BRG

☐ PROBES MOUNTED TO MEASURE INCREASING GAP FOR NOR.OP.

☐ PROBES MOUNTED TO MEASURE DECREASING GAP FOR NOR.OP.

PHASE REFERENCE TRANSDUCERS / ONE EVENT PER REVOLUTION

☒ DRIVER EQUIPMENT

☐ HVSD

- ☐ INPUT SHAFT
- ☒ OUTPUT SHAFT

☐ DRIVEN EQUIPMENT

☐ SPARE TRANSDUCER

☐ OTHER (DESCRIBE) _____

ROD DROP PROBES

☐ DUAL PROBES TOP AND BOTTOM

☐ TOP ONLY

☐ BOTTOM ONLY

☐ OTHER _____

SPEED INDICATOR PROBES

☒ STANDARD

☐ OTHER _____

OVERSPEED SENSING PROBES

☒ STANDARD [b]

☐ STANDARD OPTION

☐ OTHER _____

CHARGE AMPLIFIER DATA

☐ INSTRUMENT MANUFACTURER'S MODEL No. _____

☐ DIMENSIONS, mm _____ x _____ x _____

OSCILLATOR-DEMODULATOR

☒ SUPPLIED WITH DIN RAIL MOUNTING

☐ OTHER (SPECIFY) _____

EXTENSION CABLE DATA

☒ STANDARD 4.0 METER LENGTH, NON-ARMORED

☐ OPTION 4.0 METER LENGTH, ARMORED

☒ CABLE CONNECTOR ELECTRICAL ISOLATION

- ☐ INSULATING SLEEVE
- ☐ INSULATING WRAP (SPECIFY): _____

☐ OTHER _____

PIEZO ELECTRIC ACCELEROMETER DATA

GENERAL:

- ☐ INSTRUMENT MANUFACTURER'S MODEL No. _____
- ☐ ACCELEROMETER POWER REQ. _____ 24VDC _____ mA
- ☐ SPECIAL BODY MATERIAL _____
- ☐ MOUNTING ENVIRONMENT TEMPERATURE, ºC _____

TRANSDUCER MOUNTING:

- ☐ API APPENDIX FIGURE: ☐ C1 ☐ C2 ☐ C3
- ☐ OTHER _____
- ☒ STANDARD MOUNTING / STANDARD ACCELEROMETER

PIEZO ELECTRIC ACCELEROMETER DATA (CONT.)

☒ ACCELEROMETER WITH THE FOLLOWING OPTIONS:

- ☐ CENTER-POST MTG - ENGLISH THREADS OTHER THAN ¼"-28-UNF. SPECIFY THREADS: _____
- ☐ CENTER-POST MTG - METRIC THREADS. SPECIFY THREADS: _____
- ☐ INTEGRAL EXTENSION CABLE
- ☐ INTEGRAL CENTER POST
- ☒ STANDARD 5 METER ACCELEROMETER EXTENSION CABLE
- ☐ OTHER (DESCRIBE) _____

☒ EXTENSION CABLE PROTECTION

- ☒ STANDARD CONDUIT _____
- ☐ OPTIONAL WEATHERPROOF FLEXIBLE ARMOR

☐ NUMBER OF ACCELEROMETERS PER BEARING _____

☐ NUMBER OF CHANNELS IN TRAIN _____

TEMPERATURE SENSOR DATA

☐ SENSORS NOT REQUIRED

☒ STD. 100 ohm, PLATINUM, THREE-LEAD RTD'S, WITH A TEMP. COEFFICIENT OF RESISTANCE EQUAL TO 0.00385 ohm/ohm/ºC

☐ OPT GROUNDED, TYPE J IRON / COP.-NICKEL (CONSTANTAN) THERMOCOUPLE

☐ GROUNDED, TYPE K THERMOCOUPLE

☐ OTHER (DESCRIBE) _____

☐ FLEXIBLE STAINLESS STEEL OVERBRAIDING ON LEADS

TEMPERATURE SENSOR MOUNTING

☒ EMBEDDED SENSORS

☐ SPRING-LOADED SENSORS (BAYONET TYPE)

☐ OTHER (DESCRIBE) _____

☒ ELECTRICAL INSULATED FROM BEARING

RADIAL BEARING TEMPERATURE SENSOR ARRANGEMENT

☒ SENSORS REQUIRED

☐ SENSORS NOT REQUIRED

☐ SLEEVE TYPE, L/D RATIO > 0.5

☐ SLEEVE TYPE, L/D RATIO ≤ 0.5

☐ TILT-PAD TYPE, L/D RATIO > 0.5

☐ TILT-PAD TYPE, L/D RATIO ≤ 0.5

- ☐ LOAD-ON PAD
- ☐ LOAD-BETWEEN-PADS

☐ OTHERS (DESCRIBE) _____

THRUST BEARING TEMPERATURE SENSOR ARRANGEMENT

☒ SENSORS REQUIRED

☐ SENSORS NOT REQUIRED

☒ STANDARD TWO SENSORS IN ACTIVE BEARING.

☐ _____ SENSORS _____ DEGREES APART IN ACT. BEARING

☒ STANDARD TWO SENSORS IN INACTIVE BEARING

☐ _____ SENSORS _____ DEGREES APART IN INACT. BEARING

☐ OTHERS (DESCRIBE) _____

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		INTERNAL	

MONITOR SYSTEM

☐ MONITOR MOUNTING DIMENSION, mm
HEIGHT _____ WIDTH _____ DEPTH _____
LOCATION ☒ INDOOR ☐ OUTDOOR
☐ REQUIREMENTS OF SAFETY INSTRUMENTED SYSTEM (SIS) APPLY AS SPECIFIED BELOW:
_____
_____
☒ REMOTE TIMESET
POWER SUPPLY REQUIREMENTS
☒ STANDARD
☐ OTHER: _____
☐ ACCURACY REQ. FOR STANDARD OPTION POWER
☐ SUPPLIES IN ACCORDANCE WITH _____
☒ REDUNDANT POWER SUPPLY REQUIRED
OUTPUTS
☐ 4 TO 20 mA
☐ ANALOG ☒ STANDARD DIGITAL OUTPUT ☒ GRAPHIC
☒ OTHER: **PACK INTERFACE MODULE** *[NOTE 3]*
☐ TAMPERPROOF SHUTDOWN DISARM W / LIGHT EMIT. DIODE
☐ CONNECTORS OTHER THAN BNC _____
RELAYS
☐ ALARM (ALERT)
☒ STANDARD NORMALLY ENERGIZED
☐ OPTIONAL NORMALLY DEENERGIZED
☐ SHUTDOWN (DANGER)
☐ STANDARD NORMALLY DEENERGIZED
☒ OPTIONAL NORMALLY ENERGIZED
☐ HERMETICALLY SEALED ELECTRO-MECH. TYPE RELAYS
☐ CONTACTS RATED AT A RESISTIVE LOAD OF 5 A @ 120 V AC

RADIAL SHAFT VIBRATION AND AXIAL POSITION CHANNEL

TYPE OF DISPLAY — NUMBER OF PROBES MONITORED
☐ ANALOG _____ RADIAL
TYPE OF DISPLAY — NUMBER OF PROBES MONITORED
☐ LIQUID CRYSTAL DISPLAY _____
☐ LIGHT EMITTING DIODES _____
☒ OTHER **UCP_HMI**
☐ REDUNDANT CIRCUIT REQUIREMENT
READOUT RANGE

RADIAL DISPLAY	AXIAL DISPLAY
☒ STANDARD 0 TO 125 μm	☒ -1.0 TO +1.0 mm
☐ OPTIONAL 0 TO 250 μm	☐ OTHER: _____
☐ OTHER: _____	

☐ CNTRLD ACCESS FUNCT. FOR NOTIFICATION OF ALARM AND
☒ DANGER SETPOINT MULTIPLIER APPLICATION REQUIRED
☐ STANDARD 3X
☐ STANDARD OPTION 2X
☐ OTHER
_____
_____

RADIAL SHAFT VIBRATION AND AXIAL POSITION CHANNEL (CONT.)

SHUTDOWN SYSTEM
☐ STANDARD DUAL VOTING LOGIC
☐ SINGLE CHANNEL
☒ SHUTDOWN BY-PASS EACH CHANNEL

ADDITIONAL DISPLAY AND / OR DIGITAL OUTPUTS

	DISP	OUT
CHANNEL ALARM STATUS	☒	☒
ARMED/DISARMED SHUTDOWN STATUS ALL MACHINES	☒	☒
ALARM STORAGE FOR STORING THE TIME, DATE, AND VALUE FOR A MINIMUM OF 64 ALARMS	☒	☒
CHANNEL VALUE ± 0.5% FULL-SCALE RANGE RESOLUTION	☒	☒
MEASURED VALUE AS A % OF ALARM (ALERT) AND SHUTDOWN (DANGER) VALUES TO 1% RESOLUTION	☒	☒
TRANSDUCER OK LIMITS	☒	☒
HARDWARE AND SOFTWARE DIAGNOSTICS	☒	☒
COMMUNICATIONS LINK STATUS	☒	☒
ALARM SETPOINTS	☒	☒
GAP VOLTAGE	☒	☒
TIME STAMP AND DATE ALL TRANSMITTED DATA	☒	☒
LOG OF SYSTEM ENTRY TO INCLUDE DATE, TIME, INDIVIDUAL ACCESS CODE AND RECORD OF CHANGES	☒	☒
SETPOINT MULTIPLIER INVOKED	☒	☒
_____	☐	☐
_____	☐	☐

PISTON ROD DROP CHANNELS

☐ PISTON ROD DROP MONITORING REQUIRED
☐ STANDARD MONITOR SYSTEM SUPPLIED WITH ONE CHANNEL PER PISTON ROD
☐ STANDARD OPTION - TWO CHANNELS PER PISTON ROD

CASING VIBRATION CHANNEL

☐ CASING VIBRATION NOT REQUIRED
☒ CASING VIBRATION REQUIRED
NUMBER OF ACCELEROMETERS MONITORED _____
☒ STANDARD MONITOR
☐ PUMP. FAN, OR MOTOR WITH ROLLING ELEMENT BEARINGS
FREQUENCY RANGE
☐ OPTIONS
☐ MONITOR AND DISPLAY OF SINGLE CHANNEL
☐ ACCELERATION ☐ VELOCITY
☐ MONITOR AND DISPLAY TWO CHANNELS IN EITHER
☐ ACCELERATION ☐ VELOCITY
☐ MONITOR AND DISPLAY ALTERNATE FILTER OR FREQ. RANGER
☐ MONITOR AND DISPLAY UNFILTERED OVERALL VIBRATION
☐ MONITOR AND DISPLAY AMPLITUDE IN RMS
☐ MONITOR AND DISPLAY TRUE PEAK
☐ ALTERNATE SCALE RANGE: SPECIFY _____
☐ DUAL VOTING LOGIC
☐ OTHER _____

REMARKS:

[b] Required for gas turbine equipment only.

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CASING VIBRATION CHANNEL (CONT.)

☐ CNTRLD ACCESS FUNCT. FOR NOTIFICATION OF ALARM AND
☐ DANGER SETPOINT MULTIPLIER APPLICATION REQUIRED
☐ STANDARD 3X
☐ STANDARD OPTION 2X
☐ OTHER

BEARING TEMPERATURE CHANNEL

MONITOR CONFIGURATION
☐ TOTAL NUMBER OF SENSORS MONITORED
NUMBER OF BEARINGS MONITORED
☐ RADIAL
☐ ACTIVE THRUST
☐ INACTIVE THRUST
☐ OTHER (DESCRIBE)

TYPE OF DISPLAY
☒ STANDARD DIGITAL
☐ LIQUID CRYSTAL DISPLAY
☐ LIGHT EMITTING DIODES
☒ OTHER: **UCP_HMI**
☐ OTHER:

READOUT RANGE
☒ STANDARD 0ºC TO + 150ºC
☐ OTHER:

SHUTDOWN SYSTEM
☒ STANDARD DUAL VOTING LOGIC
☐ EACH RADIAL BEARING
☐ ACTIVE THRUST BEARINGS
☐ INACTIVE THRUST BEARINGS
☐ OTHER:
☐ SINGLE CHANNEL

TACHOMETER

☐ TACHOMETER NOT REQUIRED
☒ TACHOMETER REQUIRED
☒ABILITY TO RECORD / STORE HIGHEST SPEED
☒CONTROLLED ACCESS RESET REQUIRED

SYSTEM WIRING & CONDUIT

VIBRATION & POSITION SIGNAL CABLE
☐ SINGLE CIRCUIT CABLE (APPENDIX D.2)
☒ MULTIPLE CIRCUIT CABLE (APPENDIX D.3)
TEMPERATURE SIGNAL CABLE
☐ SINGLE CIRCUIT THERMOCOUPLE (APPENDIX D.4)
☐ OTHER (DESCRIBE)
OSCILATOR-DEMODULAR MOUNTING BOXES
☒ ONE PER MACHINE CASE
☐ TWO PER MACHINE CASE
☐ OTHER

FIELD-INSTALLED INSTRUMENTS

LOCATION ☐ INDOOR ☒ OUTDOOR
HOUSING / MOUNTING BOX
☒ NEMA TYPE **IEC IP56 – ZONE 2**
DRY AIR PURGE REQUIREMENTS
☐ NONE REQUIRED
☐ REQUIRED PER ISA-512.4 & NFPA 496
☐ TYPE X
☐ TYPE Y

VENDOR'S DATA

☐ No. OF COPIES OF REQUIRED DOCUMENT
☐ REQUIRED BY (SPECIFY DATE)
☐ No. OF PRINTS AND / OR REPRODUCIBLES REQ
☐ REQUIRED BY (SPECIFY DATE)
☐ OTHER

TESTING INSPECTION AND PREP FOR SHIPMENT

☒ FIELD TESTING PER APPENDIX F
☐ INSPECTION REQUIRED OF MONITORING SYST. IN INSTRUMENT MANUFACTURERS FACILITY
☐ 10 DAY NOTICE REQUIRED BEFORE TEST
☒ MONITORING SYSTEM TO BE USED DURING MECHANICAL RUNNING TEST
(DESCRIBE EXTENT TO BE USED)

☒ PROBES CALIBRATED TO INSTALLED PROBE TARGET AREA

MISCELLANEOUS

SPECIAL PACKING, SEALING, MARKING OR STORAGE REQ.
DESCRIBE:

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		INTERNAL	

OVERSPEED DETECTION SYSTEM

☒ ELECTRONIC OVERSPEED DETECTION SYSTEM REQUIRED
☐ OVERSPEED DETECTION SHALL BE PART OF A SAFETY INSTRUMENTED SYSTEM

CUSTOMER PROFILE

☒ MACHINERY VENDOR
☐ OWNER _____
☐ OTHER _____
☒ SYSTEM INTEGRATION PERFORMED BY **PACKAGER**

MACHINE DETAILS

☒ DRIVER
- ☐ ELECTRIC MOTOR
- ☐ STEAM TURBINE
- ☒ GAS TURBINE
- ☐ TURBOEXPANDER
- ☐ OTHER _____

☐ MANUFACTURER _____
☐ MODEL No. _____
☐ POWER _____
☐ RATED SPEED _____
☐ OVERSPEED TRIP SPEED _____
☐ FASTEST TIME IN WHICH MACHINE SPEED CAN DOUBLE DURING START UP _____
☒ DRIVEN MACHINE
- ☒ COMPRESSOR
- ☐ PUMP
- ☐ GENERATOR
- ☐ OTHER _____

☐ MANUFACTURER
☐ MODEL No. _____
☐ POWER _____
☐ RATED SPEED _____

SPEED SENSING SURFACE

☐ LOCATION:
- ☐ DRIVER SIDE OF COUPLING
- ☐ OTHER _____

☐ DESIGN:
- ☐ NON PRECISION OR GEAR
- ☐ PRECISION

☐ EVENTS PER REVOLUTION _____
☐ DIMENSIONS
☐ TOOTH LENGTH A= _____ mm
☐ TOOTH DEPTH B= _____ mm
☐ NOTCH LENGTH C= _____ mm
☐ TOOTH WIDTH F= _____ mm
☐ ARE ANY DIMENSIONS ABOVE SMALLER THAN ALLOWED IN TABLES J-2 OR J-3 ?
- ☐ YES
- ☐ NO

☐ IS CENTERLINE OF SPEED SENSING SURFACE SUBJECTIVE TO PEAK-TO-PEAK RADIAL VIBRATION AMPLITUDES GREATER THAN B/4 (1/4 TOOTH DEPTH)
- ☐ YES
- ☐ NO

☐ IS THE FOLLOWING RELATIONSHIP TRUE:

$$\frac{(\text{Events / rev}) \times (\text{Trip Speed}) \times (A + C)}{A \text{ or } C \text{ (whichever is greater)}} > 720{,}000 \text{ rpm}$$

- ☐ YES
- ☐ NO

SPEED SENSORS

☐ SPEED SENSOR TYPE:
- ☐ PASSIVE MAGNETIC
- ☐ ACTIVE MAGNETIC
- ☐ PROXIMITY PROBE

☐ TIP OR POLE PIECE DIAMETER _____ mm
☐ LINEAR RANGE (PROXIMITY PROBE ONLY) _____
☐ MANUFACTURER _____
☐ MODEL No. _____
ARE THESE SPEED SENSORS SHARED WITH THE GOVERNOR?
- ☐ YES
- ☒ NO

SUPPLEMENTAL PROXIMITY PROBE INFORMATION

☐ MAXIMUM PEAK-TO-PEAK RADIAL VIBRATION OF SPEED SENSING SURFACE _____
☐ MAXIMUM VARIATION IN TOOTH DEPTH (DIMENSION B) _____
☐ MAXIMUM RUNOUT OF SPEED SENSING SURFACE DUE TO NON-CONCENTRICITY _____
☐ SIGNAL CABLE LENGTH BETWEEN OSCILLATOR/DEMODULATOR AND MONITOR _____
☐ PEAK-TO-PEAK OUTPUT VOLTAGE OF TRANSDUCER VIEWING SPEED SENSING SURFACE _____

SUPPLEMENTAL MAGNETIC SPEED SENSOR INFORMATION

☐ MINIMUM RPM TO BE SENSED _____
☐ SURFACE SPEED OF SENSING SURFACE AT THIS MINIMUM RPM _____
☐ PEAK-TO-PEAK VOLTAGE OUTPUT AT MINIMUM RPM _____
☐ MAXIMUM SURFACE SPEED AT MAXIMUM (TRIP) RPM _____
☐ PEAK-TO-PEAK VOLTAGE OUTPUT AT MAXIMUM (TRIP) RPM _____
☐ POLE PIECE TYPE:
- ☐ CYLINDRICAL
- ☐ CONICAL
- ☐ CHISEL

☐ POLE PIECE DIAMETER _____ mm
☐ GEAR OR TOOTH PITCH _____ mm
☐ GEAR OR WHEEL DIAMETER _____ mm

NOTES

1. General:

1.1. Machinery protection system for main equipment package shall be in accordance with API std 670, last edition.

1.2. PACKAGER shall fill in all blank spaces (fields) in these data sheet. All not applicable spaces shall be filled in with NA (NOT APPLICABLE).

2. Site data:

2.1. The equipment supplied shall be suitable for the environment and range of ambient condition including, atmospheric pressure, relative humidity, rainfall, air temperature (dry bulb, see Obs.1), characteristics monthly values and wind motions defined at the document I-ET-3926.01-1000-941-PPC-001 – METOCEAN DATA.

Obs.1: For air temperature (dry bulb) of electric equipment, use the most critical conditions, between those defined by Classification Society and specific documentation of equipment.

2.2. For utilities, please see I-RL-3A17.01-1200-940-1J5-001 – GENERAL SPECIFICATION FOR AVAILABLE UTILITIES and I-ET-3926.01-5140-700-PPC-004 – GENERAL SPECIFICATION FOR ELECTRICAL SYSTEM.

2.3. For area classification, please see DE-3A17.01-5400-94A-1J5-001 - PLANTA DE CLASSIFICAÇÃO DE ÁREAS.

3. Automation:

3.1. For further requirements see I-ET-3A17.01-1231-321-1J5-001 – TURBOCOMPRESSOR.

4. Working group:

REV. 0		
KEY	**DEPARTMENT**	**ROLE**
CL2R	BS/ATP-IMI/MIED	EXECUTION
DHG1	BS/PCM/PROJDP	EXECUTION
FBJW	BS/PCM/PROJDP	EXECUTION
FEU5	BS/PCM/PROJDP	EXECUTION
FZ35	BS/PCM/PROJDP	EXECUTION
RZA7	BS/PCM/PROJDP	EXECUTION
SGPL	SRGE/ESUP/PIES/PPP	EXECUTION
URS8	BS/PCM/PROJDP	EXECUTION
U32A	BS/PCM/PROJDP	CHECK
BEGS	BS/PCM/PROJDP	APPROVAL