

 		<b>Low Voltage Electric Induction Motor</b>				CNRL_HORIZON	
		NO.	BY	DATE	REVISION		
<b>Project:</b> Canadian Natural Resources - Horizon Froth Treatment Plant - Train2		0	JYL	11/27/2014	ISSUED FOR CONSTRUCTION		
		B	DQ	3/13/2012	ISSUED FOR PURCHASE		
		A	DQ	3/1/2012	ISSUED FOR REVIEW		
<b>TAG NO:</b> 26-GM-2201A		MANUFACTURER TECO-Westinghouse				DATA SHEET NO. 26-GM-2201A-DS-01	
Asset No:		MODEL AEH8B				REV. 0	
Service Description: NRU STRIPPER BOTTOMS PUMP MOTOR						Sheet 1 OF 2 Date 11/27/2014	
						BY: JYL CHKD: JYL ENG: BC APPR: JYL	
						P.O. 5054	
						REQ. 26-MR-ME-0009-02	
						EPC DOC # 100087-26-140-DAT-0088-01	
<b>GENERAL</b>		PURPOSE: Issued for Construction		PREPARED BY: J. LAM		GROUP: EPC	
				NAME OF THE ORGANIZATION: AMEC			
<b>SITE CONDITIONS</b>		LOCATION: Indoors		SYSTEM VOLTAGE: 600 V PHASE: 3 WIRE: 3 FREQ: 60 Hz			
		ALTITUDE (ABOVE MEAN SEA LEVEL): 300 m		REGULATION: +/- 10%			
		OUTDOOR AMBIENT TEMP. INDOOR AMBIENT TEMP.		SYSTEM FAULT LEVEL: 40.2 kA			
		MIN: -45 °C + 10 °C		SYSTEM GROUND: High resistance			
		MAX: +35 °C + 40 °C		GROUND FAULT AMPS: 5			
		DESIGN:		SPECIAL CONDITIONS (IF ANY):			
		UNUSUAL CONDITIONS:					
		GASES: Yes DETAILS: Trace Amount of H2S, SO2					
		DUST: Yes DETAILS: Coke Dust					
		OTHER: Yes DETAILS: Trace Amount of Hydrocarbons					
		AREA CLASSIFICATION: Class 1, Zone 2, Group IIA, T3					
<b>NAME PLATE</b>		MAKE: TECO MODEL: AEH8B SERIAL: LX912B030001		FRAME SIZE: 444T			
		RATING: 59 kW 75.07 hp SF: 1.15 PF: 0.79		ENCLOSURE: TEFC			
		VOLTAGE: 575 V PHASE: 3 FREQ: 60 Hz		MOUNTING: Horizontal			
		SYNCH. SPEED: 900.0 rpm FLA: 76.5 A DESIGN: B		MAX SURFACE TEMP RISE: TEMP CODE: T3			
		INSL. CLASS: F EFFICIENCY: 0.93 KVA CODE: G		BASE TRANSITION PLATE REQUIRED: SIZE: SEE PUMP GA			
		MAX TEMP RISE: Class B COOLING: IC411		WINDING COIL MATERIAL: Copper WINDING TYPE: RANDOM			
				TOTAL NO. OF COILS:			
				ROTOR CONSTRUCTION: Alu-Die-Cast			
				STATOR SHIFT: SHAFT END PLAY:			
				FAN MATERIAL: See Notes DIRECTIONAL: BI-DIRECTIONAL			
				PAINT: VENDOR STANDARD			
				<b>MOTOR SPACE HEATERS</b>			
				No.: VOLTS: POWER:			
				OUTLINE DIMENSIONS:			
				L: 44.4 in W: 35.5 in H: 27.9 in			
<b>TERMINAL BOXES</b>		BOX LOCATION FROM ODE: RHS OVERSIZED BOX: YES					
		BREATHERS: YES DRAINS: YES DEG OF PROTECTION: IP55					
		PROVISIONS FOR PURGING: SEALING REQ'D:					
		POWER CABLE ENTRY: Bottom MAX LUG SIZE:					
		MAX CABLE SIZE: NO GROUND LUG SIZE:					
		MOTOR SPACE HEATER JB: NO TOTAL WEIGHT:					
<b>BEARINGS &amp; LUB</b>		BRG TYPE PART NUMBER		DRIVE SYSTEM			
		DE: A/F BALL BEARING 6318C3		DRIVEN-EQUIPMENT WK2: lb-ft @:			
		ODE: A/F BALL BEARING 6316C3		SHAFT: AISI 1045			
		INSULATED ODE BEARING: INSL. MATERIAL:		SINGLE: Yes DOUBLE:			
		LUBRICATION TYPE: Grease TEMP RATING:		DIRECTLY CONNECTED: No GEAR: No			
		LUBRICATION SPECIFICATION: Petro Canada Precision Synthetic EMB or equivalent		ROTATION FROM NDE: Other (see notes)			
				COUPLING:			
				SUPPLIED BY:			
				TYPE: V-BELT			
				MOUNTED BY: Pump Vendor			
				COUPLING REFERENCE: N/A			
<b>NOTES</b>							

TAG NO.		26-GM-2201A			Low Voltage Electric Induction Motor			DATA SHEET NO.		REV.	SHT	OF			
								26-GM-2201A-DS-01		0	2	2			
PERFORMANCE	MOTOR STARTING							TEST AS PER SPECIFICATION: Yes							
	LOAD :		PARTIAL:		OTHER:			TYPE TESTING:							
	RATED VOLTAGE START:		REDUCED VOLTAGE:		80%			PERFORMANCE TESTING: Factory							
	LOCKED ROTOR VALUES AT RATED VOLTAGE							SHOP INSPECTION:							
	CURRENT:		570%					STATOR INSPECTION:							
	POWER FACTOR:		0.93					RESIDUAL UNBALANCE TEST:							
	ACCELERATION TIME (WITH LOAD):							ROUTINE TEST PER API 541:							
	CURVES (@ RATED & REDUCED VOLTAGE):							POLARIZATION INDEX:							
	SPEED VS MOTOR TORQUE:		COMB. SPEED/TORQUE:					CERTIFIED DATA PRIOR TO SHIPMENT: Yes							
	SPEED VS LOAD TORQUE:														
	SPEED VS CURRENT:														
	SPEED VS POWER FACTOR:														
	RUNNING @ RATED VOLTAGE														
	FULL LOAD CURRENT:		76.5 A												
	FULL LOAD TORQUE:		445 lb-ft												
		50% LOAD		75% LOAD		100% LOAD									
EFFICIENCY (%):		0.91		0.924		0.93									
POWER FACTOR (%):		0.67		0.76		0.79									
DOCS.	SINGLE LINE DIAGRAMS:		26-SLD-EL-2006-01					APPROVAL MARKINGS:		CSA		Others			
	MOTOR SCHEMATICS:		26-SD-EL-2063					SPECIAL APPROVAL REQUIRED		TECHNICAL DEVIATIONS (IF ANY)					
	MCC SCHEDULE:							APPLICABLE STANDARDS		IEEE 841		NEMA MG-1		Others	
	LAYOUT DRAWINGS:		26-PL-EL-2048					CNRL STANDARDS		00-STD-EL-0012		00-STD-IM-000			
	VENDOR PRINTS:		Yes												
NOTES	<p>1. VFD DRIVEN MOTORS SHALL BE SUITABLE FOR INVERTER DUTY AS PER NEMA MG-1 PART 31.</p> <p>2. MOTOR COOLING FAN SHALL BE OF NON-SPARKING MATERIAL.</p> <p>3. DRIVE SYSTEM IS V-BELT CONNECTED.</p> <p>4. APPROVALS PER STANDATA LEG-ECR-2 AND, FOR VFD DRIVEN MOTORS, PER STANDATA CEC-28.</p> <p>5. ROTATION FROM NDE: BI-DIRECTIONAL</p>														

Uncontrolled When Printed