

LOW VOLTAGE SQUIRREL CAGE INDUCTION MOTOR DATA SHEET

SHT 1 OF 1

CLIENT CANADIAN NATURAL RESOURCES LTD.
PROJECT CONVERSION TO TRUCK UNLOADING STATION

TAG NO. P-909 A/B/C
SERVICE SALES OIL BOOSTER PUMPS

MANUFACTURER TECO WESTINGHOUSE
NO. REQUIRED 3

MODEL _____
DRIVEN EQUIPMENT _____

SERIAL NO. _____

MOTOR DESIGN DATA

DESIGN DATA

SPECIFICATION CNRL SPEC 12.08
POWER 100 HP kW
480 V 3 PH 60 Hz
☐ INVERTER DUTY ☐ REVERSABLE
☒ SINGLE SPEED ☐ MULTI-SPEED
TYPE _____
MAX. LOCKED ROTOR CURRENT 725 % FLA @ 90 %PF
SPEED 1800 rpm _____ rpm _____ rpm
SF 1.15
CLASS F INSULATION w/CLASS B RISE
NEMA B TORQUE DESIGN
☒ HIGH EFFICIENCY ☐ STANDARD EFFICIENCY

ENVIRONMENT

☒ HAZARDOUS LOCATION ☐ NON-HAZARDOUS LOCATION
CLASS 1 ZONE/DIV 2 GROUF BC&D TEMP T3C
☐ OUTDOOR ☐ INDOOR-WET ☒ INDOOR-DRY
☐ CORROSIVE ☐ DUST
ALTITUDE 803 m
TEMPERATURE -39 °C min 27 °C max
REL. HUMIDITY 0 % min 95 % max

ENCLOSURE

☐ ODP ☐ ODPG ☐ TENV ☒ TEFC
☐ TEFV ☐ TEPV

STATOR WINDINGS

☒ COPPER ☐ ALUMINUM

STARTER/CONTROLLER

☒ FVNR ☐ VFD
☐ FVR ☐ ELECTRONIC SOFT
☐ WYE-DELTA ☐ AUTO-TRANSFORMER
☐ MULTI-SPEED ☐ CAPACITOR
☐ OTHER: _____

INSTALLATION VENDOR TO SPECIFY

☐ HORIZONTAL ☐ DIRECT COUPLED
☐ VERTICAL - SHAFT DOWN ☐ BELT COUPLED
☐ VERTICAL - SHAFT UP ☐ GEAR UNIT
☐ FLUID COUPLING
☒ BASE PLATE ☐ SOLE PLATE ☐ NONE
BASE / SOLE PLATE BY ☒ MANUFACTURER
☐ OTHERS

ACCESSORIES AS PER CNRL SPEC 12.08

☐ RTDs (Pt100) _____ PER WINDING
☐ RTDs (Pt100) _____ PER BEARING
☒ THERMISTORS 1 PER BEARING
☒ SPACE HTR 120 V _____ W
MAIN TERMINAL BOX LOCATION ☐ F-1 ☐ F-2 ☒ STANDARD
SUPPLY CABLE TBD AWG/MCM TBD PER PHASE

TESTING

☒ AS PER SPECIFICATION
☐ OTHER _____

DOCUMENTATION

☒ AS PER SPECIFICATION
☐ OTHER _____

MANUFACTURER'S DATA

FRAME SIZE 405T
ENCLOSURE TYPE TEFC
FULL LOAD SPEED 1775
NUMBER OF POLES 4
SERVICE FACTOR 1.15
GUARANTEED MIN. EFFICIENCY 94.5 % @ FULL LOAD
INSULATION CLASS F
MOTOR TEMPERATURE RISE _____ °C
MAX. STATOR WINDING TEMP. _____ °C
WINDING ☒ RANDOM ☐ FORM
ROTOR CAGE MATERIAL _____
MAX. SOUND PRESSURE LEVEL 80 dBA @ 1m
MAX. # STARTS PER HOUR _____

LOAD	25%	50%	75%	FULL
EFFICIENCY %		<u>95</u>	<u>95.4</u>	<u>95.4</u>
CURRENT A				<u>112</u>
POWER FACTOR %		<u>80</u>	<u>85.5</u>	<u>87.5</u>

FULL-LOAD TORQUE _____ N-m
LOCKED ROTOR TORQUE 215 % FLT
BREAKDOWN TORQUE 215 % FLT
PULL-UP TORQUE 140 % FLT
ROTOR INERTIA (WK2) _____ kg-m2
LOCKED ROTOR CURRENT 725 % FLA @ _____ %PF
LR WITHSTAND TIME (COLD) 17 s
LR WITHSTAND TIME (HOT) 12 s
THERMAL TIME CONSTANT (STOPPED) _____ s
THERMAL TIME CONSTANT (RUNNING) _____ s
STARTING DUTY ☐ AS PER SPEC ☐ OTHER _____

MOTOR WEIGHT 59 kg
MOTOR DIMENSIONS: LENGTH _____ mm
WIDTH _____ mm
HEIGHT _____ mm

MAIN TERMINAL BOX LOCATION _____ facing NDE
MATERIAL _____
TEMP. TERMINAL BOX LOCATION _____ facing NDE
MATERIAL _____
HTR TERMINAL BOX LOCATION _____ facing NDE
MATERIAL _____

FAN MATERIAL

FAN ROTATION ☐ UNIDIRECTIONAL ☐ REVERSIBLE
BEARINGS DE TYPE 6317C3 ☐ INSULATED
BEARINGS NDE TYPE 6313ZC3 ☐ INSULATED
GREASE TYPE MOBILITH SHC 100
TOTAL SHAFT END FLOA _____ mm
LIMIT END FLOAT TO _____ mm

REMARKS:



JOB NO. 201-01-35
DATA SHEET NO. 2010135-DS-E-00-013-01

REV	DATE	ELEC	MECH	CHKD	APPR
A	DEC 15/11	DL	EA		
0	MAR/07/12	KD/	EA	SR	