



**RETURN BIDS TO:**

**RETOURNER LES SOUMISSIONS À:**

**Bid Receiving - PWGSC / Réception des soumissions  
- TPSGC**  
11 Laurier St. / 11, rue Laurier  
Place du Portage, Phase III  
Core 0B2 / Noyau 0B2  
Gatineau, Québec K1A 0S5  
Bid Fax: (819) 997-9776

**SOLICITATION AMENDMENT  
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**  
Raison sociale et adresse du  
fournisseur/de l'entrepreneur

**Issuing Office - Bureau de distribution**  
Electrical & Electronics Products Division  
11 Laurier St./11, rue Laurier  
7B3, Place du Portage, Phase III  
Gatineau, Québec K1A 0S5

<b>Title - Sujet</b> MOTOR, ALTERNATING CURRENT	
<b>Solicitation No. - N° de l'invitation</b> W8482-178512/A	<b>Amendment No. - N° modif.</b> 002
<b>Client Reference No. - N° de référence du client</b> W8482-178512	<b>Date</b> 2016-06-14
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$HN-324-71003	
<b>File No. - N° de dossier</b> hn324.W8482-178512	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2016-07-05</b>	<b>Time Zone</b> Fuseau horaire Eastern Daylight Saving Time EDT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Theriault, Joelle	<b>Buyer Id - Id de l'acheteur</b> hn324
<b>Telephone No. - N° de téléphone</b> (819) 956-3484 ( )	<b>FAX No. - N° de FAX</b> (819) 953-4944
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> Raison sociale et adresse du fournisseur/de l'entrepreneur	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> (type or print) <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

Solicitation No. - N° de l'invitation  
W8482-178512/A  
Client Ref. No. - N° de réf. du client  
W8482-178512

Amd. No. - N° de la modif.  
002  
File No. - N° du dossier  
hn324. W8482-178512

Buyer ID - Id de l'acheteur  
hn324  
CCC No./N° CCC - FMS No./N° VME

La modification 002 est émise pour la raison suivante :

- 1) Pour répondre aux questions

**1) Aux Questions & Réponses:**

**Insérer:**

Q1. SVP fournir les informations de la plaque d'identification. Aussi, quelle est l'application?

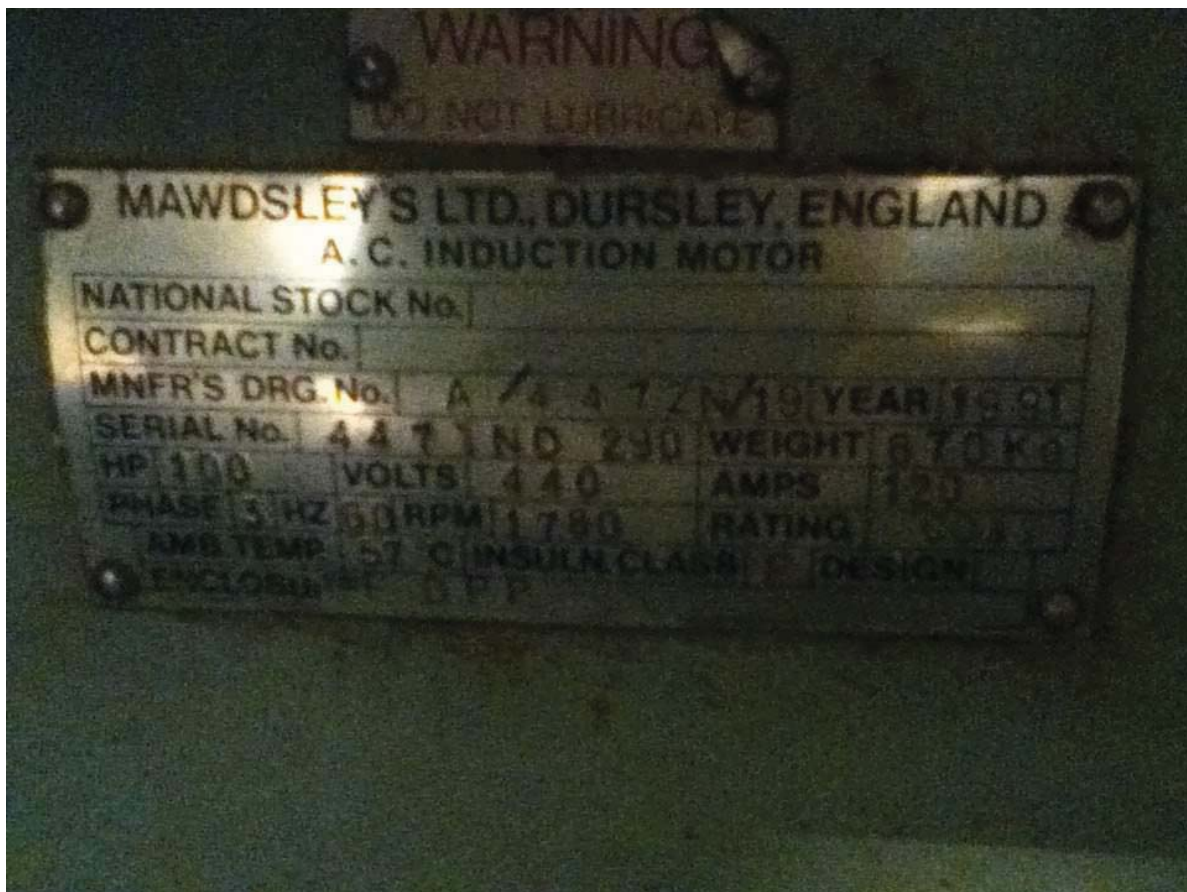
A1. Vous trouverez ci-dessous une photo de la plaque d'identification. L'application est pour le système de direction du moteur principal.

Q2. Pouvez-vous nous fournir une copie des dessins et spécifications techniques du moteur existant?

A2. Dessins et spécifications en pièce-jointe.

Q3. Pouvez-vous fournir une photo de ces moteurs et de la plaque signalétique?

A3. Aucune photo du moteur disponible. Plaque signalétique ci-dessous.



**LES TERMES ET CONDITIONS RESTANTS DEMEURENT INCHANGÉS.**



MACHINE NOS 347TND 280-295  
MAWDSLEY'S LIMITED  
ZONE WORKS  
DURSLEY GLOS., ENGLAND  
MOTOR A.C.  
THE 1988 YORK UNIVERSITY NUMBERS  
A/447TND/19



FOR PARTS LIST SEE SHEET 2  
FOR DETAIL OF SHAFT (ITEM 5)  
SEE SHEET 2

CENTRE OF GRAVITY  
MACHINE NO. 447TND 280-295  
MAWDSLEY'S LIM  
ZONE WORKS  
DURSLEY, GLOS., EN  
MOTOR A.

REF ID: A4471







GUARANTEED PERFORMANCE AT RATED VOLTAGE AND FREQUENCY		
LOAD	EFFICIENCY	POWER FACTOR
PULL	98.5%	0.975
50% TORQUE	98.0%	0.95
100% TORQUE	97.0%	0.92

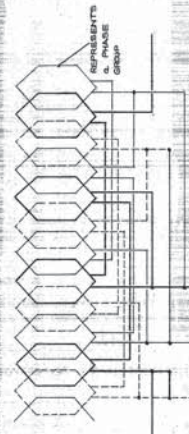
LOCKED-ROTOR TORQUE FACTOR	2.8
LOCKED-ROTOR CURRENT	7.5 AMP
LOCKED-ROTOR TORQUE	110% OF FLT
PULL-UP TORQUE	100% OF FLT
BREAKDOWN TORQUE	200% OF FLT

SPECIFICATIONS AND EXCEPTIONS	
THE MOTOR DESCRIBED ON THIS DRAWING IS IN ACCORDANCE WITH THE FOLLOWING EXCEPTIONS:	
SLOT QUALITY PER MIL-S-40100 GRADE 1, TYPE A	
WINDING TEMPERATURE OF 40°C	
STATOR DIAMETER INSIDE IS 13.67 IN. CORE LENGTH 18.0 IN.	
ROTOR DIA. OUTSIDE 12.25 IN. NO. OF BARS 38	
SIZE OF END RING - 1.85 IN. END RING MAT'L COPPER	
WINDING DATA	
NUMBER OF POLES	4
TYPE OF CONNECTIONS	DELTA
NUMBER OF SLOTS	48
NUMBER OF COILS	12
WINDING PITCH IN SLOTS	1-11
TURN IN SERIES PER COIL	8
CONDUCTOR DIAMETER	0.055"
CONDUCTOR INSULATION	DUAL COATED POLYIMIDE
CONDUCTOR IN PARALLEL	1
RES. BETWEEN TERM. IN OHMS	0.0759 @ 15°C
WEIGHT OF COPPER	1.4 LBS
TREATMENT OF STATOR WINDING	TRI-TRIPLE DIPPED IN POLYESTER ISOPHTHALATE VARNISH AND BAKED AT 180°C

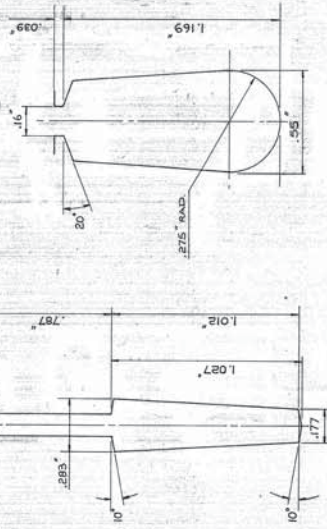
INSULATION	MATERIAL	NAVY SPEC.
SLOT LINER	COMPOSITE (NNN)	
SPACER	COMPOSITE (NNN)	
TOP WEDGE	EPOXY GLASS	
SLOT CLOSURE	COMPOSITE (NNN)	
INS. ON COIL LEADS	ARYLE EPOXY BOND GLASS EPOXY	
INS. ON COIL EXT.	HOT INSULATED	
INS. ON COIL CONDS	ARYLE EPOXY BOND GLASS EPOXY	
COMPLETED STATOR	REGULATING WAX	
LEAD WIRE	ALUMINUM SILICONE	
LEAD WIRE CURRENT CAPACITY	185 AMP	

NOISE TEST	
AIRBORNE NOISE TEST DATA	
OCTAVE BAND CENTER FREQUENCY (Hz)	dB LEVEL RE 200 μPa SOUND PRESSURE
31.5	
63	
125	
250	
500	
1000	
2000	
4000	
>5600	

STRUCTUREBorne NOISE (4000 RE 10 <sup>-3</sup> CM/SEC <sup>2</sup> )	
OCTAVE BAND CENTER FREQUENCY (Hz)	dB LEVEL RE 10 <sup>-3</sup> CM/SEC <sup>2</sup> (4000)
31.5	
63	
125	
250	
500	
1000	
2000	
4000	
>5600	

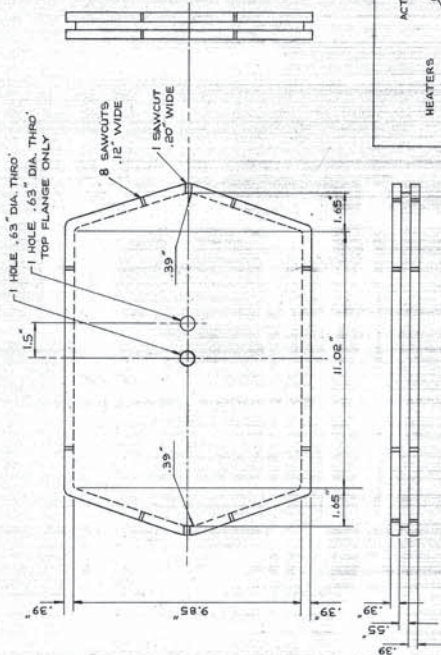


48 SLOT D.L.L. 3 PHASE 4 POLE WINDING  
2 PARALLEL PATHS

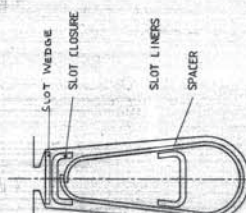


ROTOR SLOT DETAIL No. R 4-51  
SCALE: 1:1

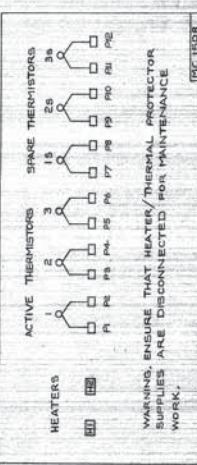
STATOR SLOT DETAIL No. S165  
SCALE: 1:1



STATOR COIL FORMER No. FN 3277  
SCALE: 1:2



STATOR SLOT SECTION  
AND INSULATION DETAILS

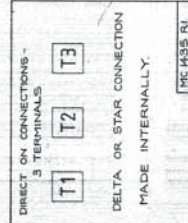


SCHEMATIC WIRING DIAGRAM  
No. MC 150B

TEMPERATURE RISE DATA - DEGREES CENT GRADE			
LOAD ON TEMPERATURE RISE	100% LOAD	4-5% LOAD	100% LOAD
LENGTH OF TEMPERATURE RISE	HOURS	MINUTES	HOURS
TEMPERATURE RISE	1	2	3
1-HOUR BEFORE SHUTDOWN	116.5	73.5	67.5
LOW SPEED	116.5	73.5	67.5
FINAL WHILE RUNNING	116.5	73.5	67.5

LOCATIONS OF NUMBERED THERMOCOUPLES			
NO. 1 - STATOR, CORE	NO. 2 - FRONT END STATOR COILS	NO. 3 - DRIVE END STATOR COILS	NO. 4 - DRIVE END STATOR COILS
RESISTANCE (OHMS) AND RISE BY RESISTANCE (DEGREES CENT GRADE)	RESISTANCE (OHMS) AND RISE BY RESISTANCE (DEGREES CENT GRADE)	RESISTANCE (OHMS) AND RISE BY RESISTANCE (DEGREES CENT GRADE)	RESISTANCE (OHMS) AND RISE BY RESISTANCE (DEGREES CENT GRADE)
COLD AT 20°C	0.0771	0.0771	0.0771
HOT AT 23°C	0.0918	0.0918	0.0918
RISE BY RESISTANCE	45.6	44.28	44.95
SHOCK TEST REFERENCE			

PERFORMANCE AT RATED VOLTAGE AND FREQUENCY											
HIGH SPEED						LOW SPEED					
LOAD	W	LB-FT	HP	EFF	P.F.	W	LB-FT	HP	EFF	P.F.	
LOCKED ROTOR	440	757	25300	—	—	440	757	25300	—	—	
PULL-UP	440	—	—	—	—	440	—	—	—	—	
BREAKDOWN	440	—	—	—	—	440	—	—	—	—	
LOCKED ROTOR	440	—	—	—	—	440	—	—	—	—	
PULL-UP	440	—	—	—	—	440	—	—	—	—	
BREAKDOWN	440	—	—	—	—	440	—	—	—	—	



SCHEMATIC WIRING DIAGRAM  
No. MC 1435 R1

HAWSLEY'S LIMITED  
DURSLEY, GLOS., ENGLAND  
MOTOR A.C.  
A/447ND/19