

ABB BALDOR RELIANCE III

Customer information packet

CEM3311T-G

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	213TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV NEMA PREMIUM UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	9.700 A @ 460.0 V 19.400 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	9.7 a

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGS520
Layout	37LYK447
Eff. date	06-11-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	03-08-2020

Insulation Class	H
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3734M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.06 IN
Power Factor	79
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3553LUA									
CAT.NO.	CEM3311T-G								
SPEC.	37-0000821								
HP	7.5								
VOLTS	230/460								
AMPS	19.4/9.7								
RPM	1770								
FRAME	213TC		HZ	60			PH	3	
SF	1.15	CODE	J	DES	A	CLASS	H		
NEMA NOM. EFF	91	PF	79						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	SN							
DE	6307		ODE	6206					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 7.5HP 190/380V 23.2/11.6A							SF1.0	

AC Induction Motor Performance Data

Record # 52783

Typical performance - not guaranteed values

Winding: 37WGS520-R013			Type: 3734M		Enclosure: OPSB		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		7.5	Full Load Torque		22.4 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		19.4/9.7	Breakdown Torque		77.6 LB-FT		
R.P.M.		1770	Pull-up Torque		38.7 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque		46.3 LB-FT		
NEMA Design Code		A	KVA Code		J	Starting Current	72.2 A
Service Factor (S.F.)		1.15	No-load Current		4.94 A		
NEMA Nom. Eff.		91	Power Factor		79	Line-line Res. @ 25°C	1.53 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		37°C		
S.F. Amps			Temp. Rise @ S.F. Load		45°C		
			Locked-rotor Power Factor		39.2		
			Rotor inertia		0.836 LB-FT2		

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	60	72	78	82	83	81
Efficiency	85.1	90.4	91.6	91.3	90.5	89.4	90.7
Speed	1792	1785	1778	1769	1760	1749	1766
Line amperes	5.35	6.5	8.01	9.89	11.9	14.2	11

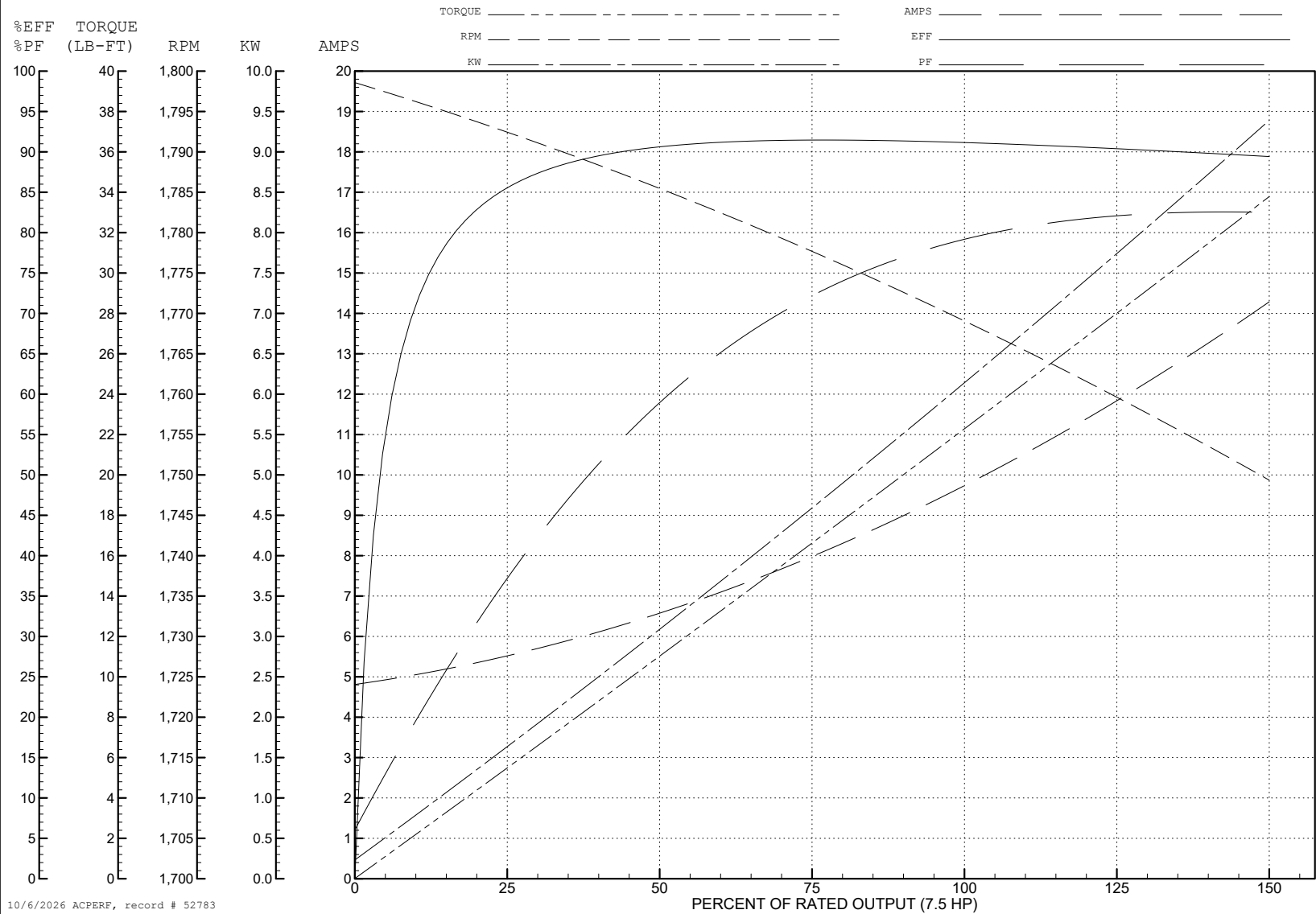
ABB Motors and Mechanical Inc.

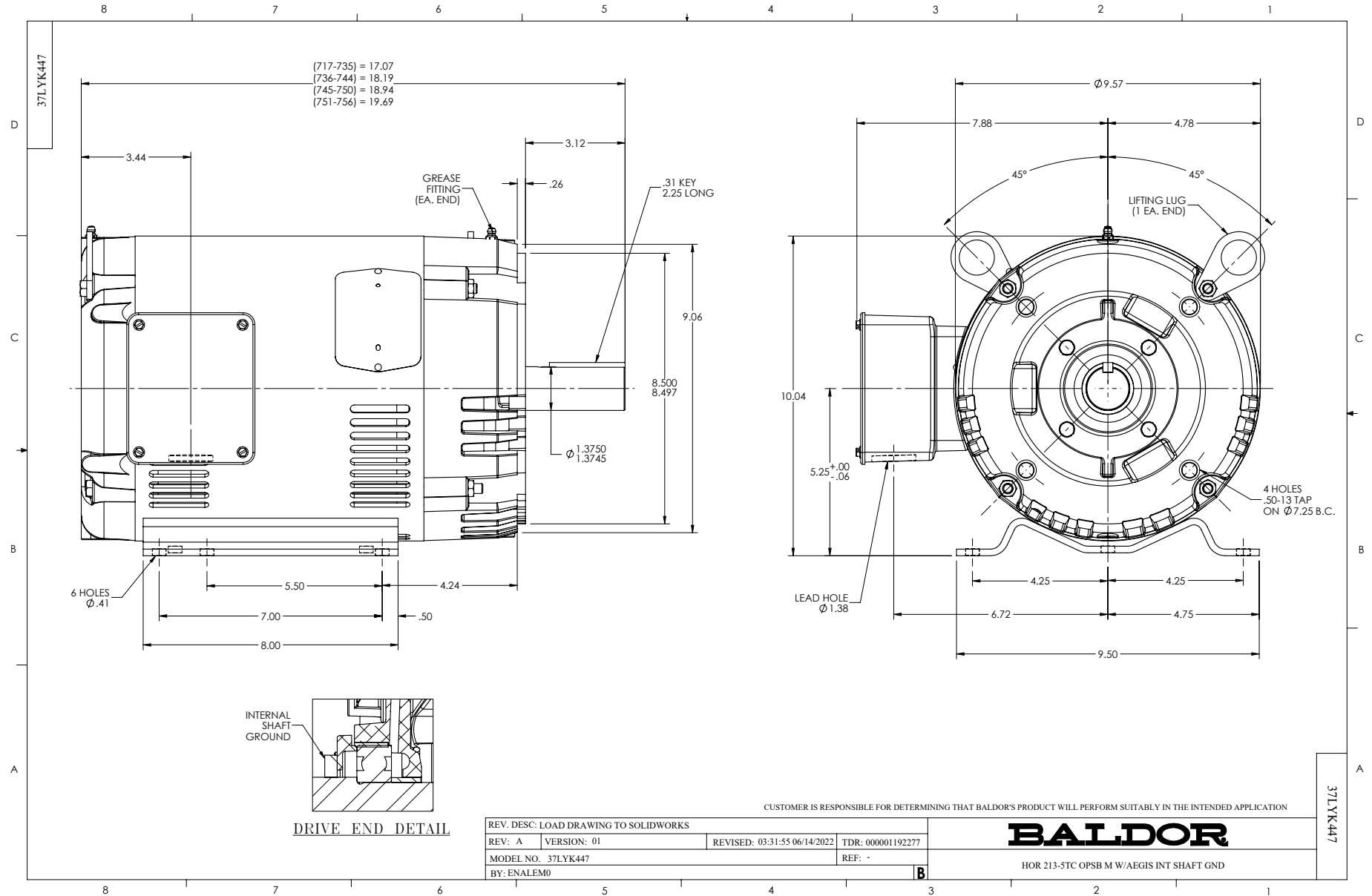
WINDING # 37WGS520

Typical performance - not guaranteed values.

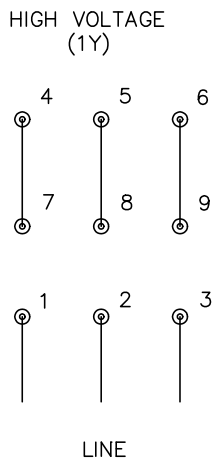
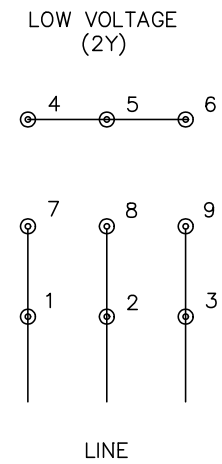
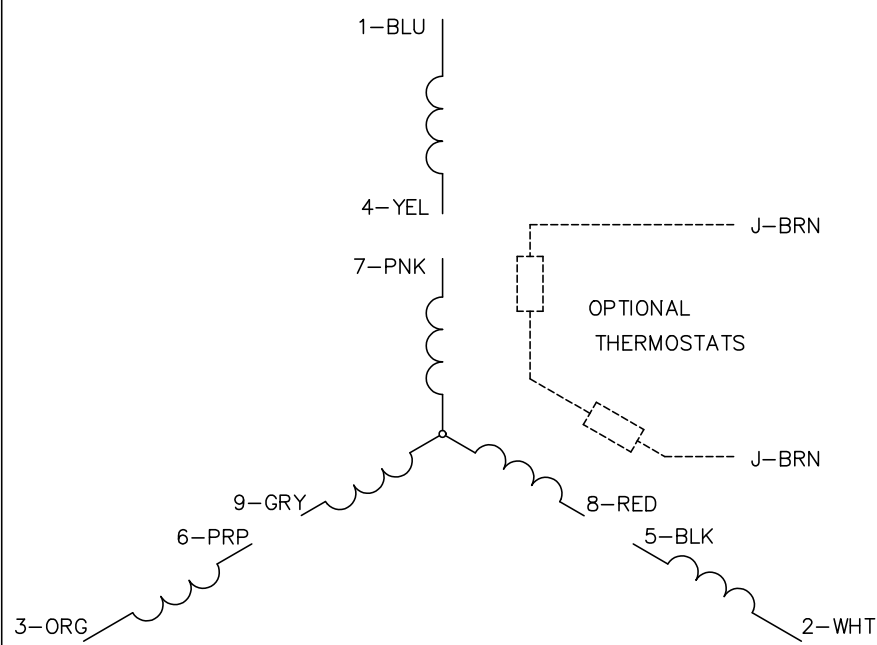
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3734M

TORQUES (LB-FT): PO=77.6 PU=38.7 LR=46.3 LRA=72.2





CD0005



- NOTES:
- 1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
 - 2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
 - 3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
 - 4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005