

ABB BALDOR RELIANCE III

Customer information packet

CEM3714T-G

10HP, 1770RPM, 3PH, 60HZ, 215TC, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	215TC
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	10.000 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	24.000 A @ 230.0 V 12.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	12.0 a

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGS518
Layout	37LYJ841
Eff. date	05-01-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	12-17-2019

Insulation Class	H
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3752M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	21.26 IN
Power Factor	85
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

NP3441LUA									
CAT.NO.	CEM3714T-G								
SPEC	37-0000-0185								
HP	10								
VOLTS	230/460								
AMPS	24/12								
RPM	1770								
FRAME	215TC		HZ	60		PH	3		
SF	1.15	CODE	K	DES	A	CLASS	H		
NEMA NOM. EFF	91.7	PF	85						
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC	SER							
DE	6307		ODE	6206					
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
50HZ 10HP 190/380V 29.2/14.6A									SF1.0

AC Induction Motor Performance Data

Record # 53387

Typical performance - not guaranteed values

Winding: 37WGS518-R065			Type: 3752M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		10	Full Load Torque		29.45 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		24/12	Breakdown Torque		134 LB-FT		
R.P.M.		1770	Pull-up Torque		49.2 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		68.7 LB-FT	
NEMA Design Code		A	KVA Code	K		Starting Current	103 A
Service Factor (S.F.)		1.15	No-load Current		5.49 A		
NEMA Nom. Eff.		91.7	Power Factor	85	Line-line Res. @ 25°C		0.93503 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		63°C
S.F. Amps					Temp. Rise @ S.F. Load		81°C
					Locked-rotor Power Factor		35
					Rotor inertia		1.28 LB-FT2

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	66	79	85	84	87	84
Efficiency	88.9	92.1	92.4	91.8	90.3	89	90.9
Speed	1793.9	1786.8	1779.7	1771.8	1762.7	1752.5	1766
Line amperes	6.14	7.8	9.9	12.3	15	17.9	13.9

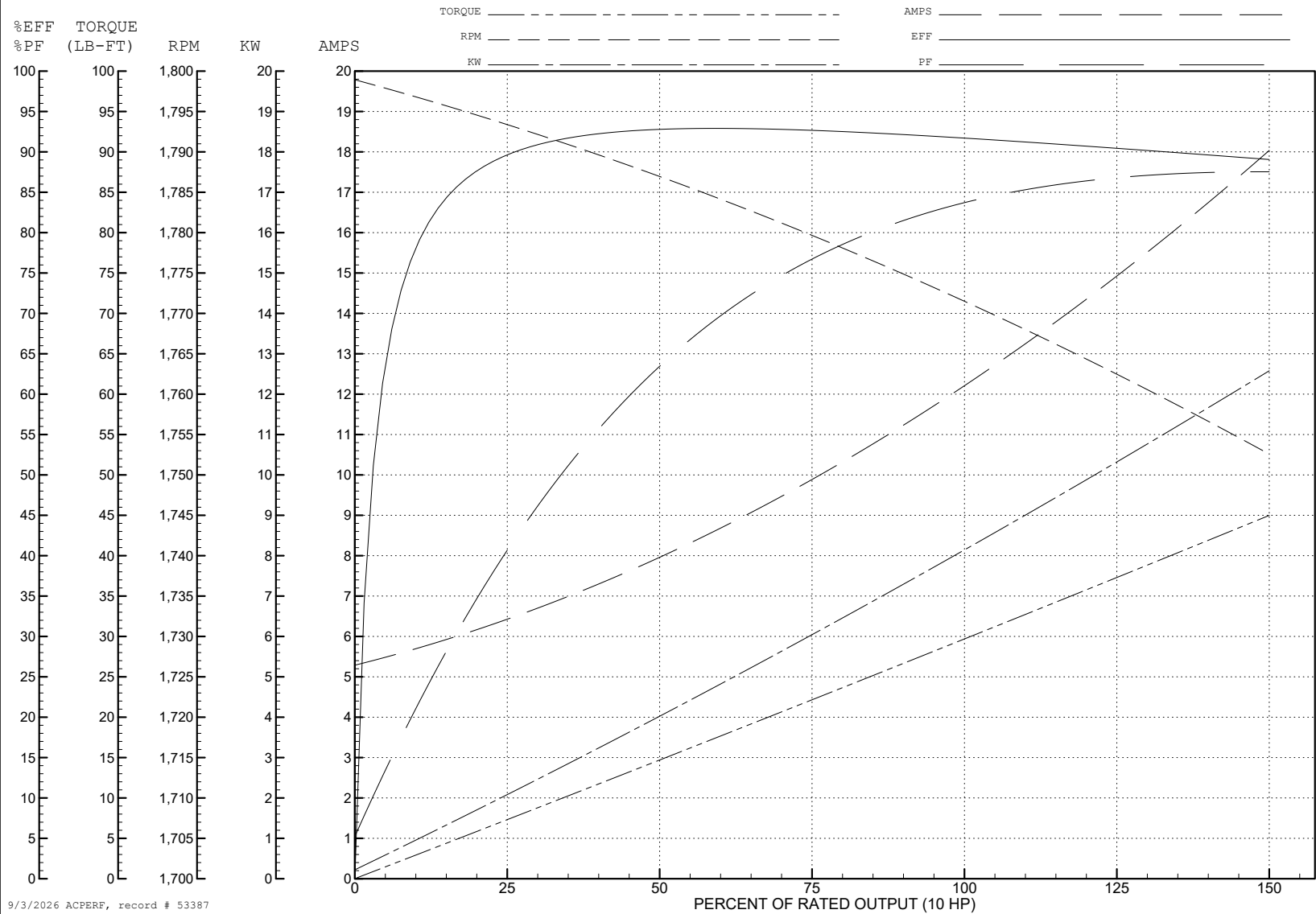
ABB Motors and Mechanical Inc.

WINDING # 37WGS518

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1770 RPM 460 V 3752M

TORQUES (LB-FT): PO=134 PU=49.2 LR=68.7 LRA=103



AC Induction Motor Performance Data

Record # 59471

Typical performance - not guaranteed values

Winding: 37WGS518-R065				Type: 3752M		Enclosure: TEFC		
Nameplate Data				230 V, 60 Hz: Low Voltage Connection				
Rated Output (HP)		10		Full Load Torque		29.5 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		24/12		Breakdown Torque		134 LB-FT		
R.P.M.		1770		Pull-up Torque		49.2 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		68.7 LB-FT		
NEMA Design Code		A	KVA Code	K	Starting Current		206 A	
Service Factor (S.F.)		1.15		No-load Current		11 A		
NEMA Nom. Eff.		91.7	Power Factor	85	Line-line Res. @ 25°C		0.234 Ω	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		63°C
S.F. Amps						Temp. Rise @ S.F. Load		77°C
						Locked-rotor Power Factor		35.5
						Rotor inertia		1.28 LB-FT2

Load Characteristics 230 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	76	82	86	88	84
Efficiency	88.6	92.4	92.7	92	90.8	88.9	91.3
Speed	1794	1787	1780	1772	1763	1753	1767
Line amperes	12.3	15.6	19.8	24.6	30	35.8	27.8

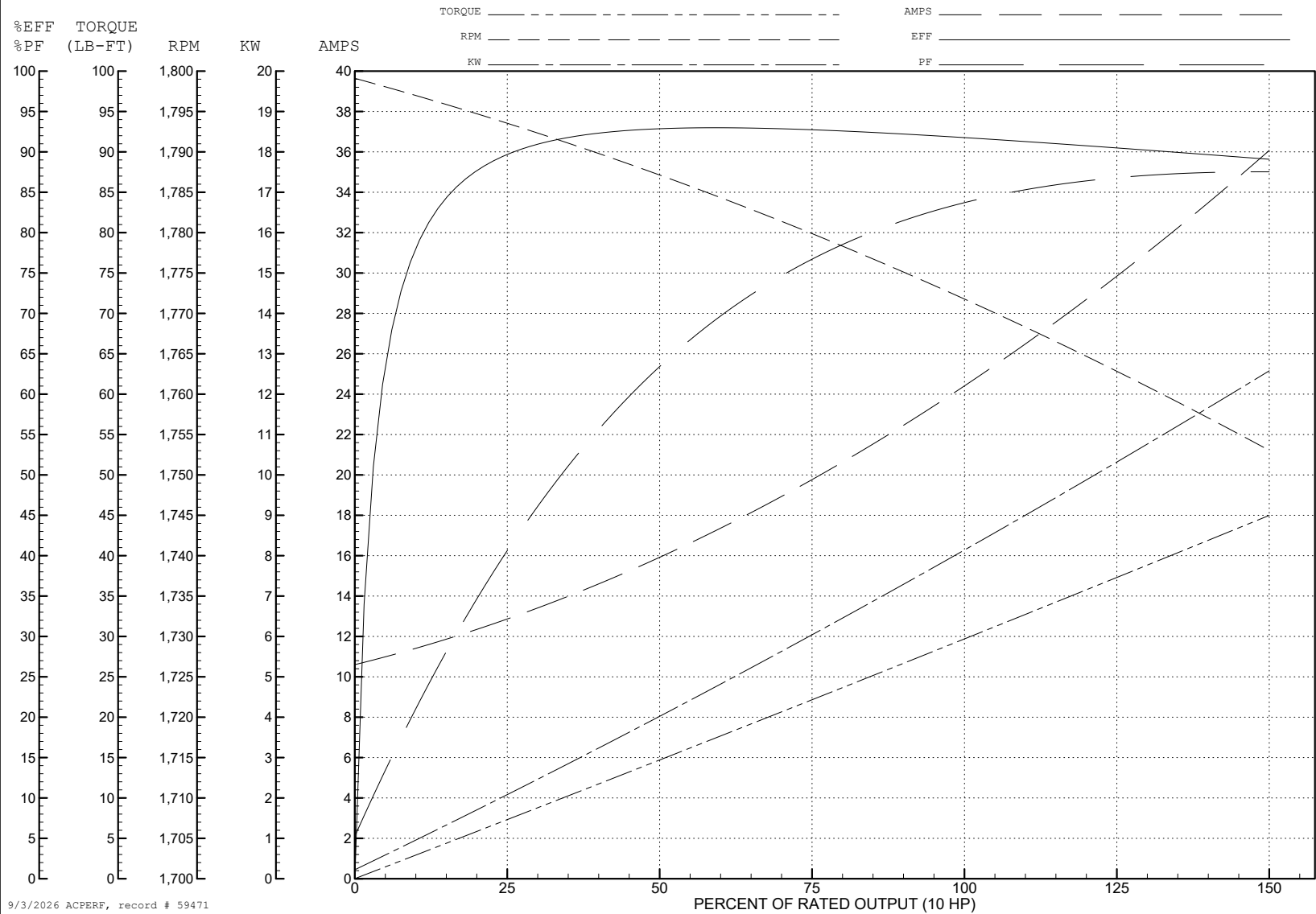
ABB Motors and Mechanical Inc.

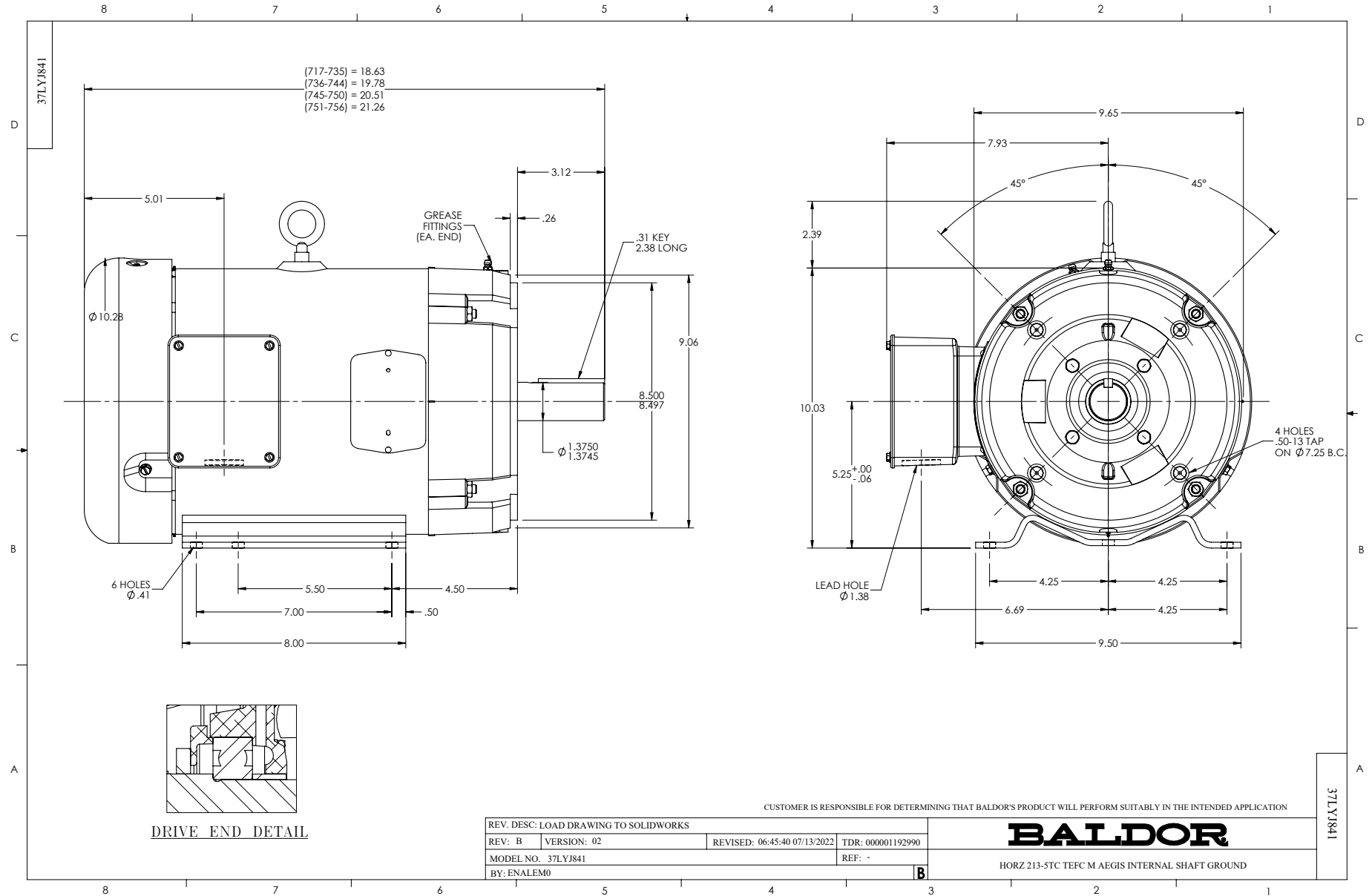
WINDING # 37WGS518

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1770 RPM 230 V 3752M

TORQUES (LB-FT): PO=134 PU=49.2 LR=68.7 LRA=206





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