

ABB BALDOR RELIANCE III

Customer information packet

EM3710T-9

7.5HP, 1765RPM, 3PH, 60HZ, 213T, 3744M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213T
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 EEV NEMA PREMIUM 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	21.500 A @ 208.0 V 20.200 A @ 230.0 V 10.100 A @ 460.0 V
Design Code	C
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	M
Type	AC
Mech. spec.	37N527
Base	
Status	PRD/A
Elec. spec.	37WGR648
Layout	37LYN527
Eff. date	03-09-2026
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	10-28-2015

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	10.1 a
Insulation Class	F
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3744M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.02 IN
Power Factor	76
Product Family	WP Below Decks Marine Duty
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1765 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

NP1267L											
CAT.NO.	EM3710T-9										
SPEC.	37N527R648G1										
HP	7.5										
VOLTS	230/460										
AMP	20.2/10.1										
RPM	1765										
FRAME	213T		HZ	60				PH	3		
SER.F.	1.15	CODE	H	DES	C	CL	F				
NEMA-NOM-EFF	91.7	PF	76								
RATING	40C AMB-CONT										
CC	010A										
DE	6307		ODE	6206							
ENCL	TEFC	SN									

AC Induction Motor Performance Data

Record # 46685

Typical performance - not guaranteed values

Winding: 37WGR648-R001				Type: 3744M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5		Full Load Torque		22.45 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		20.2-10.1		Breakdown Torque		61.2 LB-FT	
R.P.M.		1765		Pull-up Torque		49.9 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		62.06 LB-FT	
NEMA Design Code		C	KVA Code	H	Starting Current		61.95 A
Service Factor (S.F.)		1.15		No-load Current		4.69 A	
NEMA Nom. Eff.		91.7	Power Factor	76	Line-line Res. @ 25°C		1.15 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		62°C	
S.F. Amps				Temp. Rise @ S.F. Load		76°C	
				Locked-rotor Power Factor		40.2	
				Rotor inertia		1.08 LB-FT2	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	61	72	77	80	81	78
Efficiency	87.3	91.6	92.1	91.7	90.9	89.7	91.3
Speed	1792	1784	1775	1765	1753	1741	1759
Line amperes	5.22	6.43	8.07	9.97	12.2	14.53	11.4

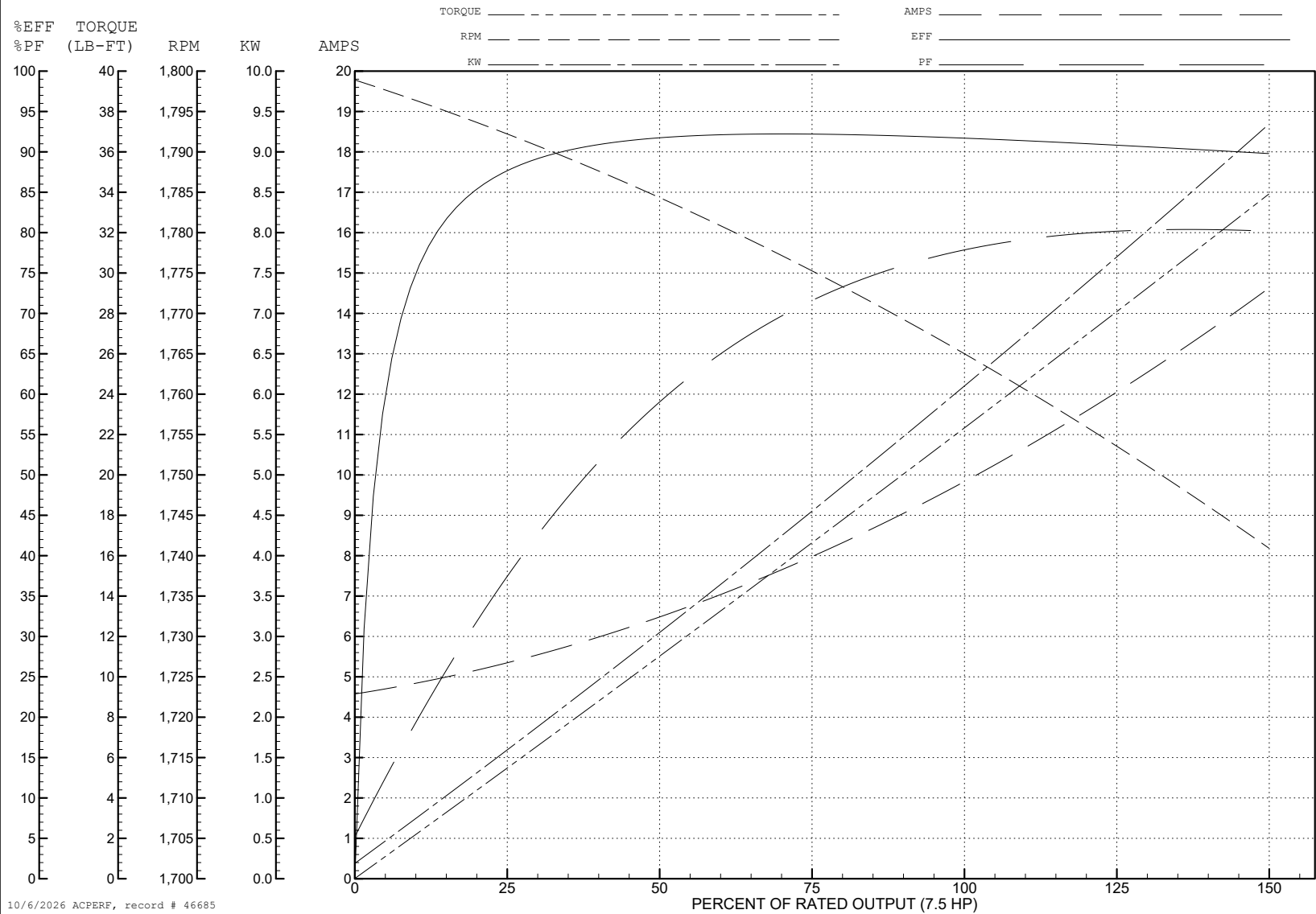
ABB Motors and Mechanical Inc.

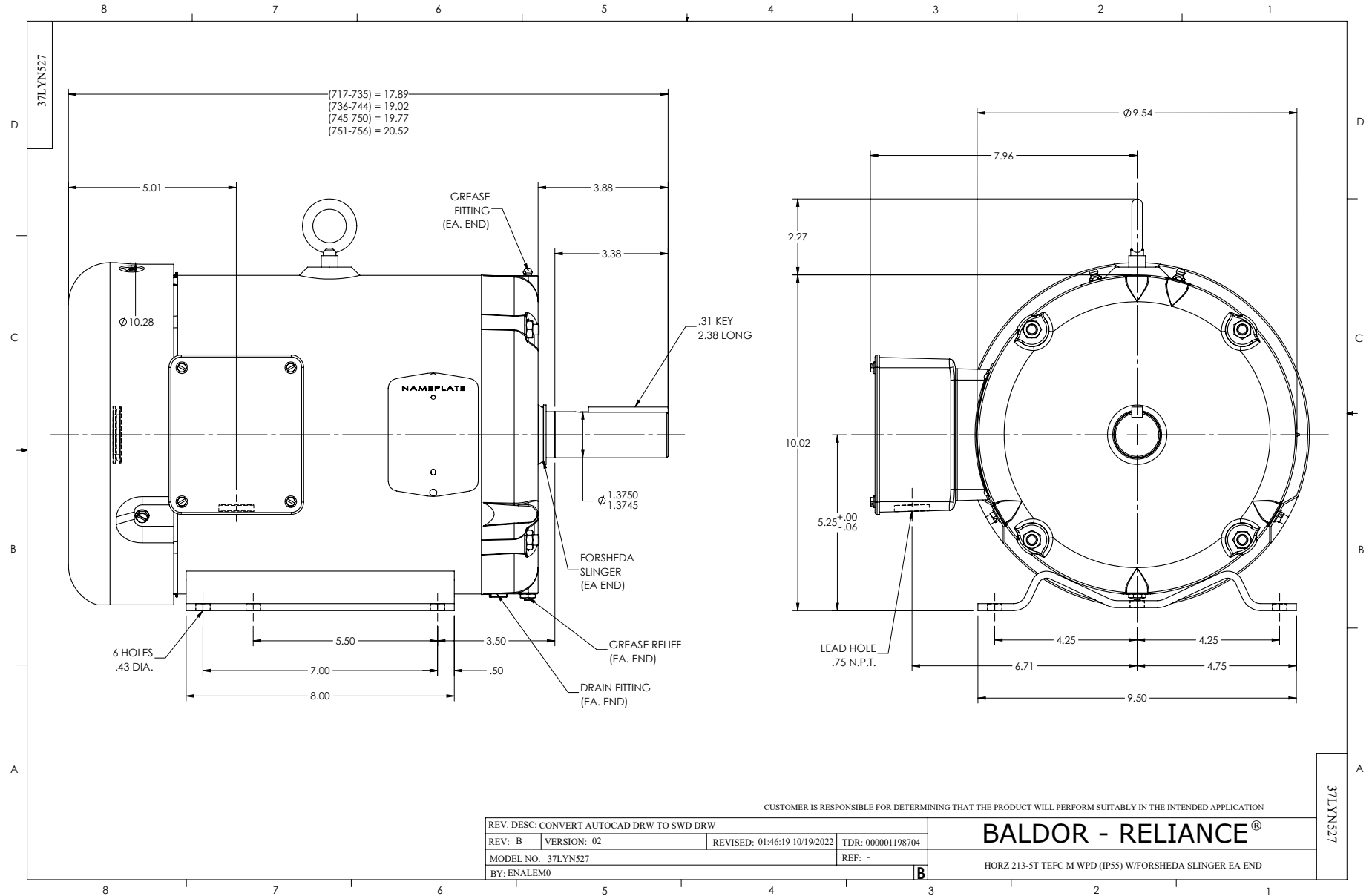
WINDING # 37WGR648

Typical performance - not guaranteed values.

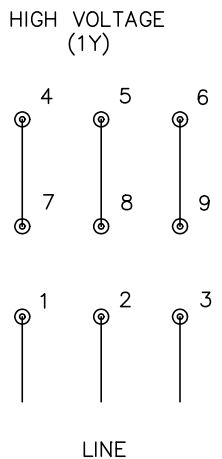
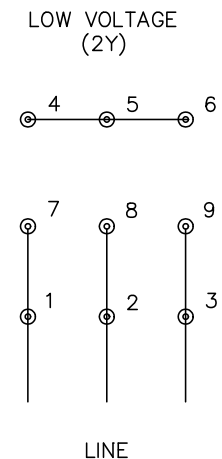
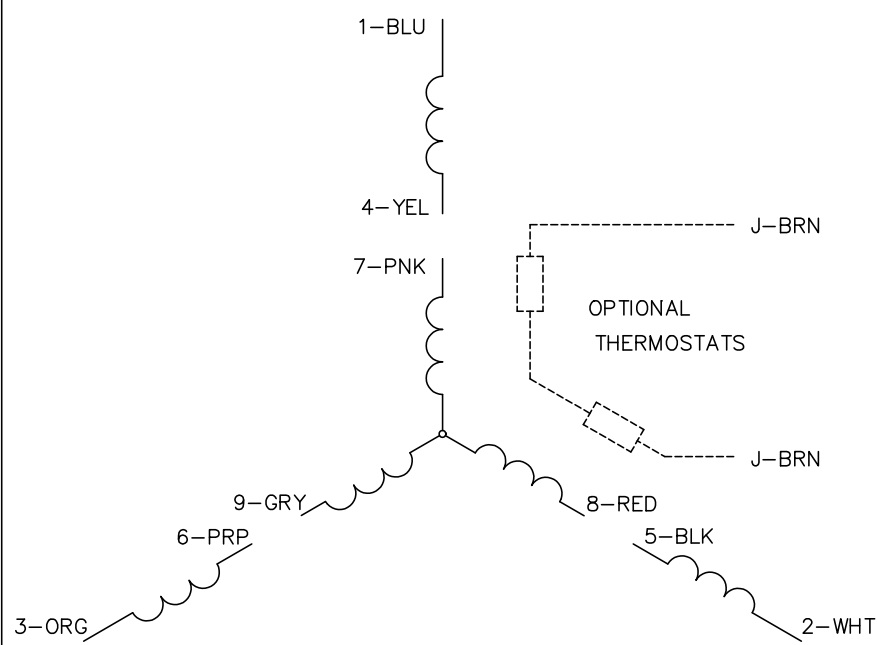
7.5 HP 3 PH 60 HZ 1765 RPM 460 V 3744M

TORQUES (LB-FT): PO=61.2 PU=49.9 LR=62.06 LRA=61.95





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