

ABB BALDOR RELIANCE III

Customer information packet

EM2513T-BG

15HP, 1765RPM, 3PH, 60HZ, 254T, 3948M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	254T
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	15.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
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	18.000 A @ 460.0 V 36.000 A @ 230.0 V 38.000 A @ 208.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	18.0 a
Insulation Class	H

Part Detail

Revision	R
Type	AC
Mech. spec.	39E531
Base	
Status	PRD/A
Elec. spec.	39WGY375
Layout	39LYE531
Eff. date	06-11-2024
CD Diagram	CD0180
Poles	04
Leads	9#12
Proprietary	False
Created date	09-29-2017

Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3948M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.19 IN
Power Factor	85
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No 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

NP3553LUA									
CAT.NO.	EM2513T-BG								
SPEC.	39E531Y375G1								
HP	15								
VOLTS	230/460								
AMPS	36.4/18.2								
RPM	1770								
FRAME	254T		HZ	60		PH	3		
SF	1.15	CODE	J	DES	A	CLASS	H		
NEMA NOM. EFF	93	PF	83						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	SN							
DE	6309		ODE	6208					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 15HP 190/380V 42/21A						SF1.0		

AC Induction Motor Performance Data

Record # 67094

Typical performance - not guaranteed values

Winding: 39WGY375-R002			Type: 3948M		Enclosure: OPSB			
Nameplate Data			460 V, 60 Hz: High Voltage Connection					
Rated Output (HP)		15	Full Load Torque		44.53 LB-FT			
Volts		230/460	Start Configuration		direct on line			
Full Load Amps		36/18	Breakdown Torque		141 LB-FT			
R.P.M.		1765	Pull-up Torque		60.4 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		77.2 LB-FT		
NEMA Design Code		A	KVA Code	G	Starting Current		117 A	
Service Factor (S.F.)		1.15	No-load Current		6.37 A			
NEMA Nom. Eff.		93	Power Factor		85	Line-line Res. @ 25°C		0.62591 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		26°C	
S.F. Amps			Temp. Rise @ S.F. Load		32°C			
			Locked-rotor Power Factor		32.8			

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	51	73	81	85	87	87	86
Efficiency	89.9	93.1	93.5	93	92.3	91.2	92.6
Speed	1792	1784.7	1776.9	1768	1759.3	1748.7	1763
Line amperes	7.67	10.4	13.8	17.7	21.8	26.5	20.2

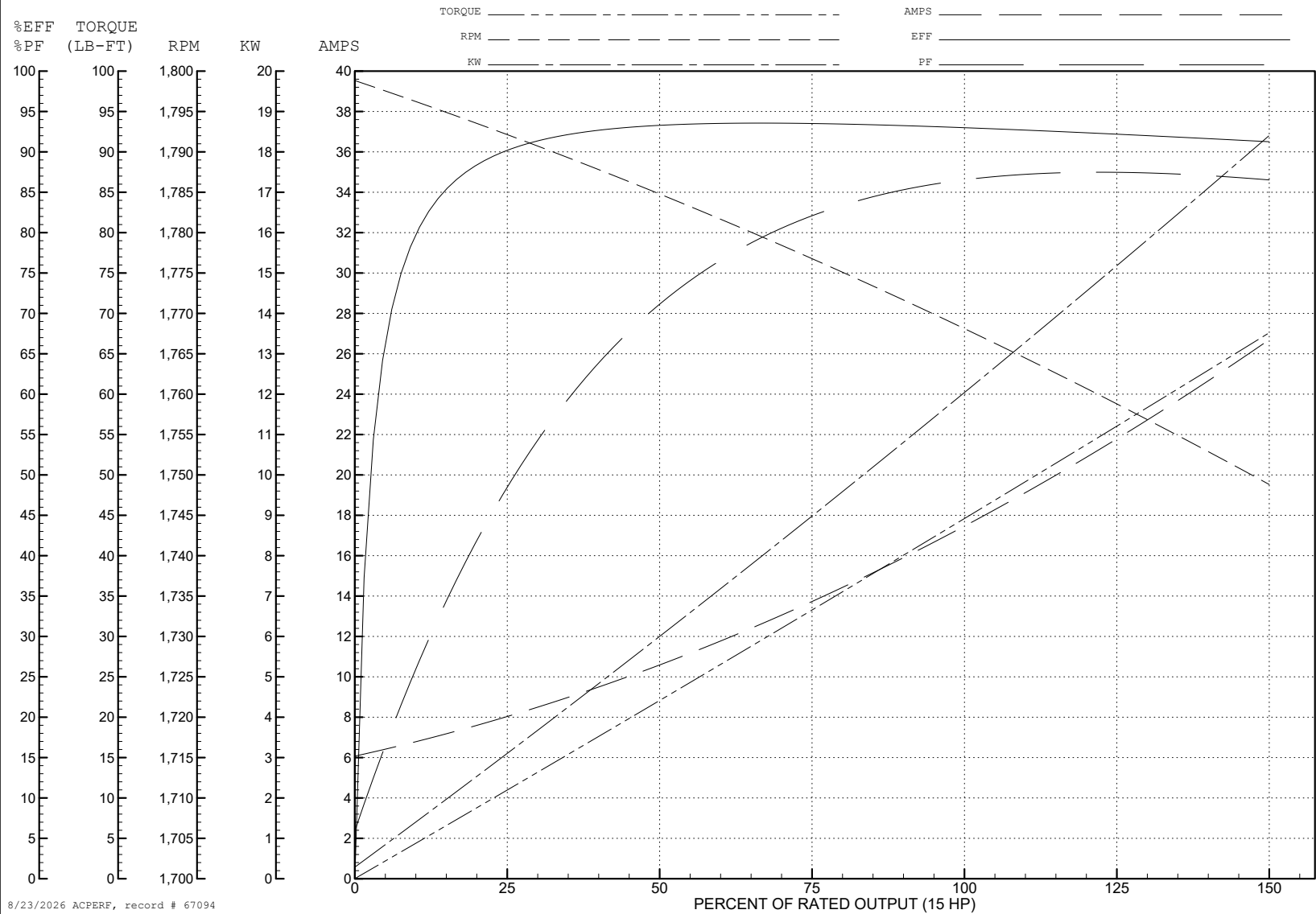
ABB Motors and Mechanical Inc.

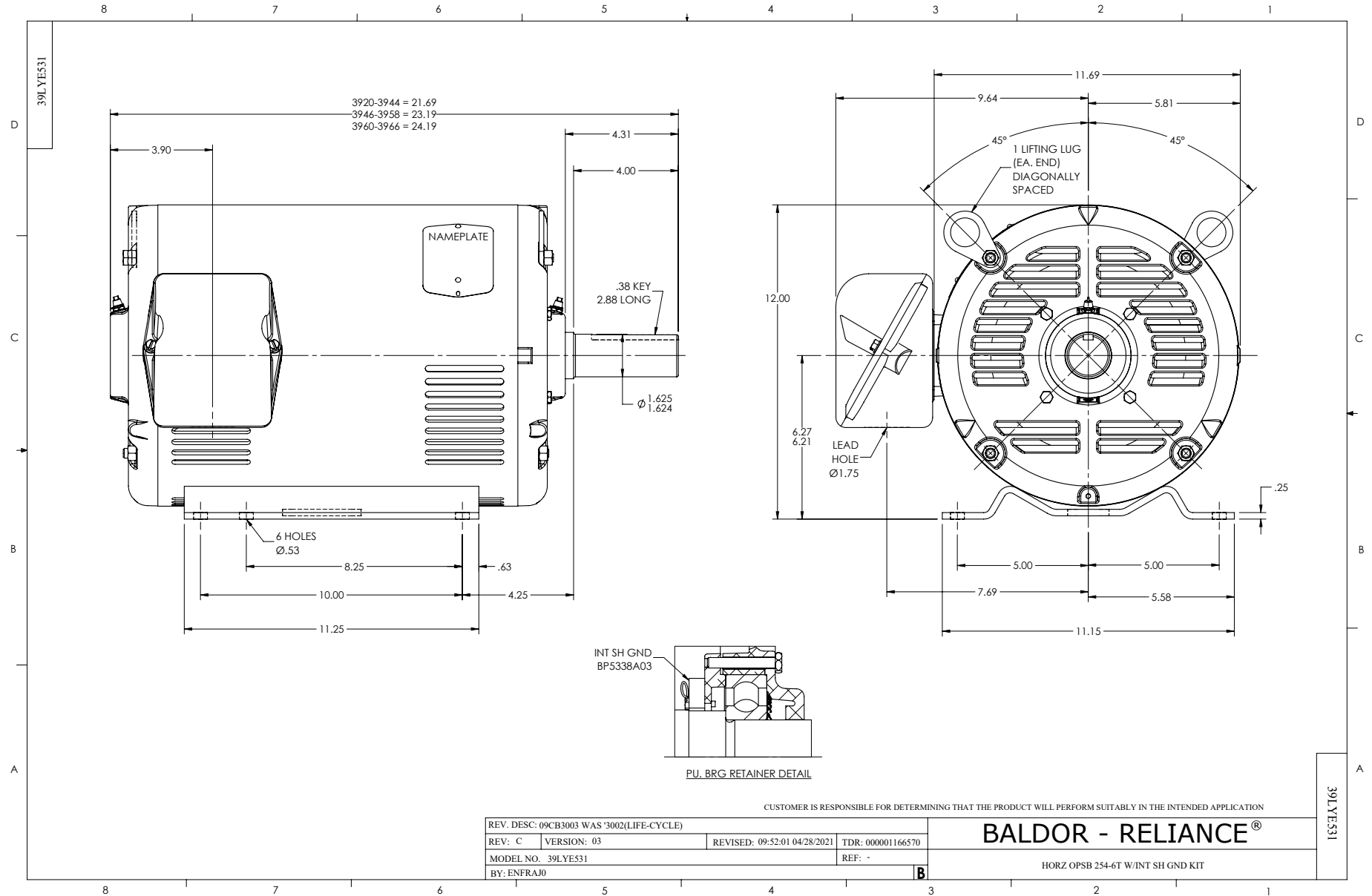
WINDING # 39WGY375

Typical performance - not guaranteed values.

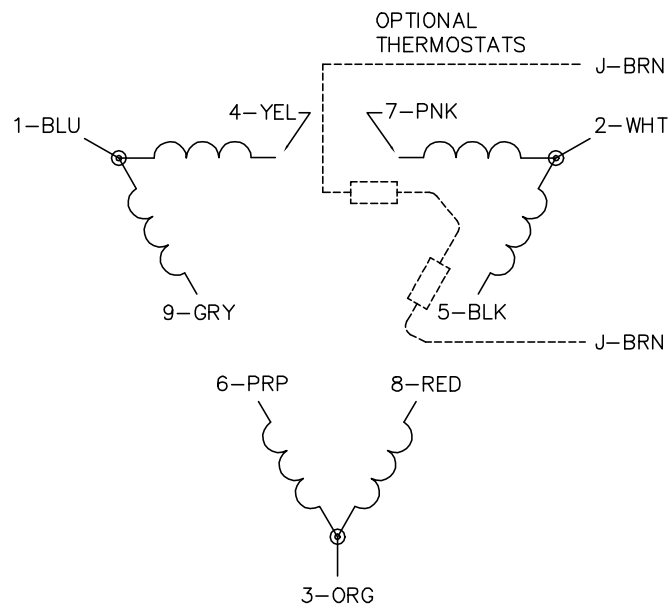
15 HP 3 PH 60 HZ 1765 RPM 460 V 3948M

TORQUES (LB-FT): PO=141 PU=60.4 LR=77.2 LRA=117

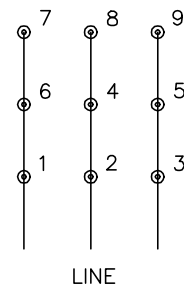




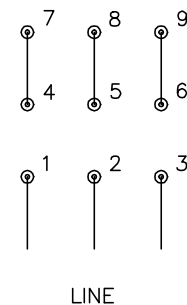
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



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.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —



BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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