

ABB BALDOR RELIANCE III

Customer information packet

EM4100T-BG

15HP, 1175RPM, 3PH, 60HZ, 284T, 1046M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	284T
Frame Material	Iron
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	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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	42.000 A @ 208.0 V 42.000 A @ 230.0 V 21.000 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
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AA
Type	AC
Mech. spec.	10J470
Base	
Status	PRD/A
Elec. spec.	10WGY561
Layout	10LYJ470
Eff. date	08-07-2026
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	10-09-2013

Heater Indicator	No Heater
High Voltage Full Load Amps	21.0 a
Insulation Class	H
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	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	1046M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	27.76 IN
Power Factor	73
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	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1175 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP3443LUA												
CAT.NO.	EM4100T-BG				CUST. P/N				ENCL			TEFC
SPEC.	10J470Y561G1	CC	010A	FRAME	284T	SER.NO.						
HP	15		CLASS	H	HZ	60						
R.P.M.	1175		PH.	3	DES.	A						
VOLTS	230/460		CODE		H	ODE BRG		6309	DE BRG	6311		
AMPS	42/21											
RATING	40C AMB-CONT		NEMA NOM. EFF.			91.7		GREASE		POLYREX EM		
P.F.	73	SER.F.	1.15		CT6-60H(10:1)VT3-60H(20:1							
USABLE AT	50HZ 15HP 190/380V 48/24A			SF1.0								
VOLTS	AMPS	MAX. SPACE HEATER TEMP.										

AC Induction Motor Performance Data

Record # 36291

Typical performance - not guaranteed values

Winding: 10WGY561-R006			Type: 1046M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		15	Full Load Torque		67 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		42/21	Breakdown Torque		239 LB-FT		
R.P.M.		1175	Pull-up Torque		72.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		116 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		136 A
Service Factor (S.F.)		1.15	No-load Current		10.3 A		
NEMA Nom. Eff.		91.7	Power Factor	73	Line-line Res. @ 25°C		0.50771 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		43°C
S.F. Amps					Temp. Rise @ S.F. Load		51°C
					Locked-rotor Power Factor		33
					Rotor inertia		5.63 LB-FT2

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	58	69	76	79	81	78
Efficiency	86.7	91.5	92.6	92.6	92.2	91.3	92.4
Speed	1196.3	1192.7	1189.2	1185.1	1180.6	1174.6	1182
Line amperes	11.4	13.6	16.7	20.3	24.4	29.7	22.8

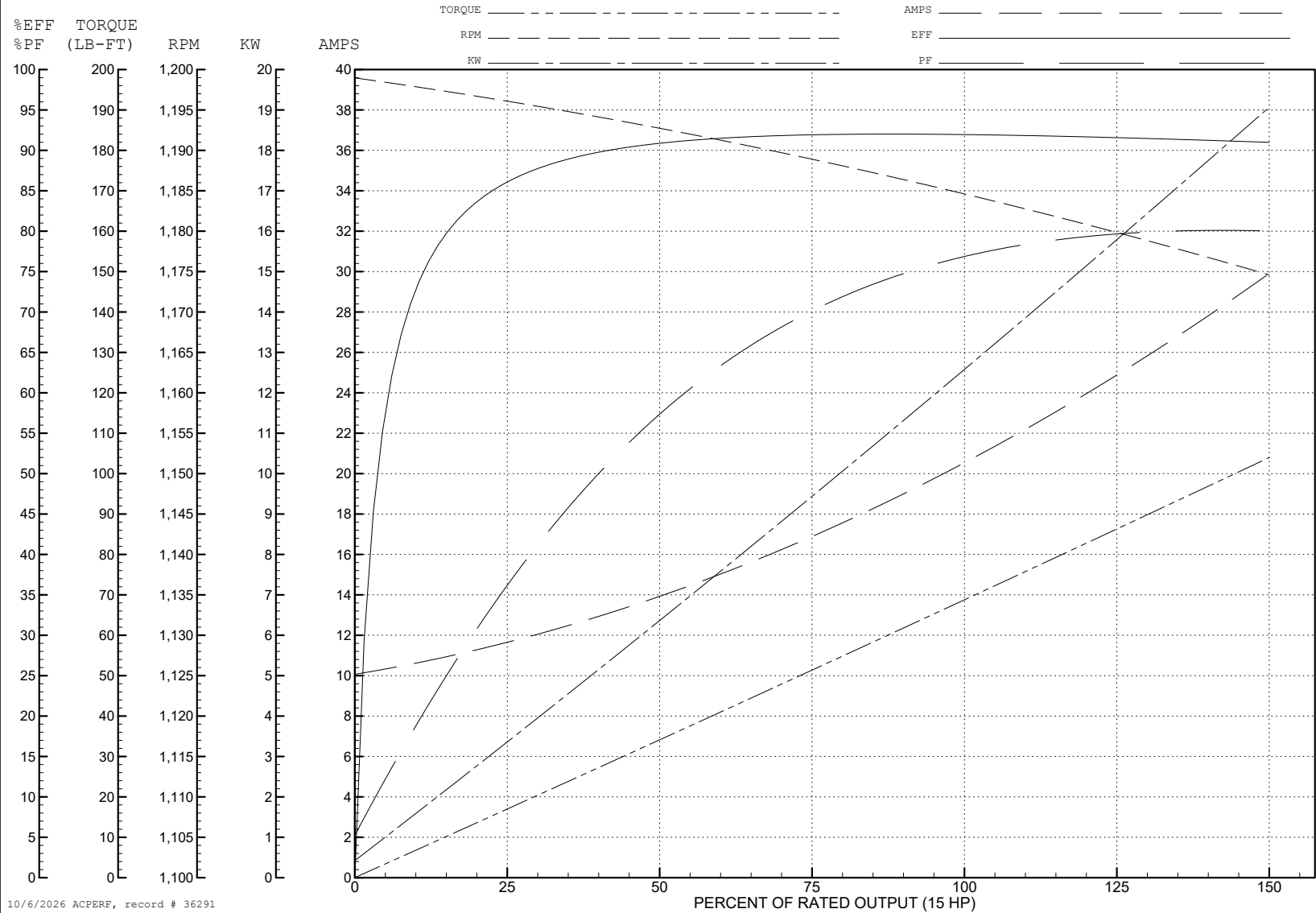
ABB Motors and Mechanical Inc.

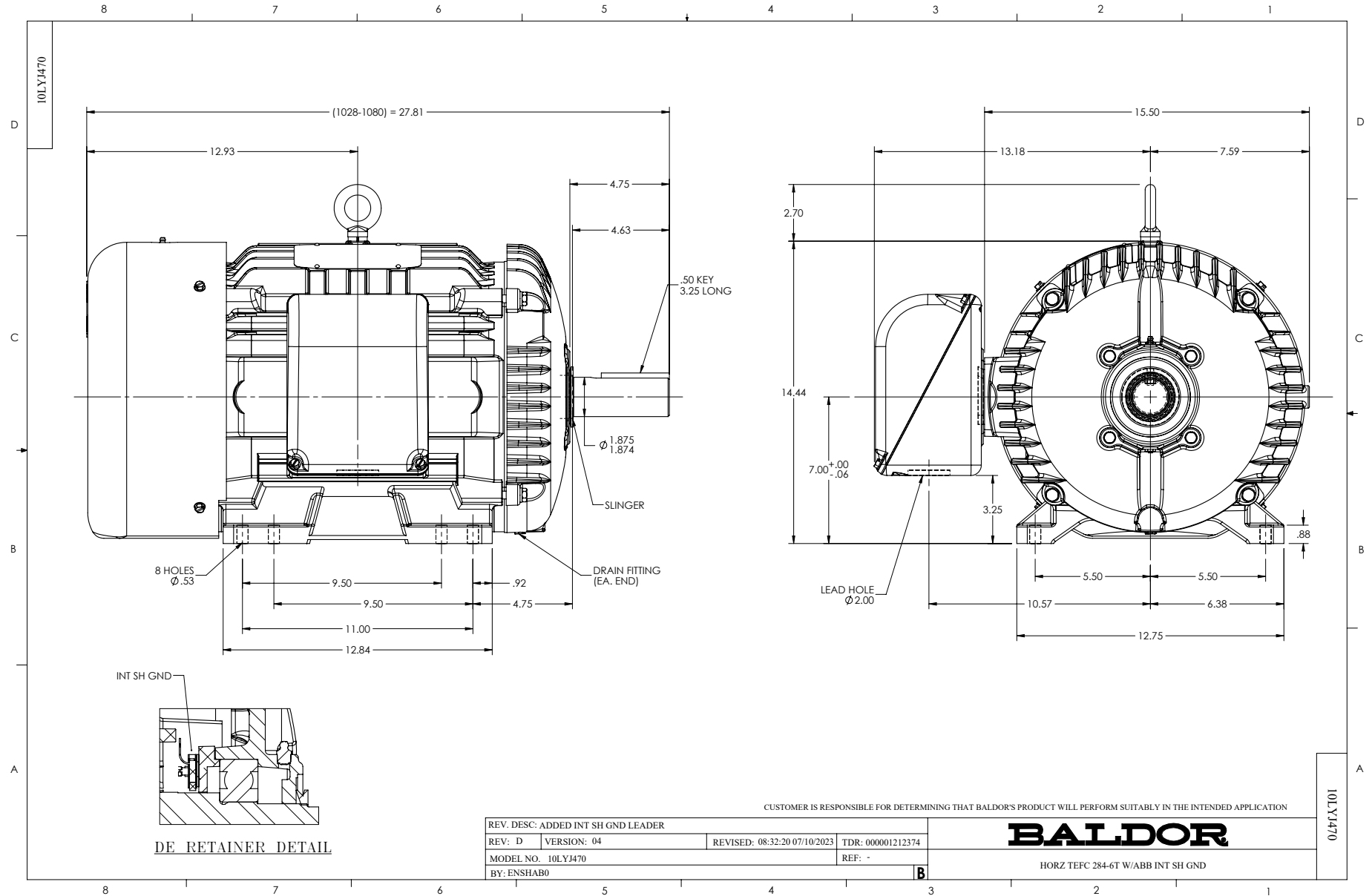
WINDING # 10WGY561

Typical performance - not guaranteed values.

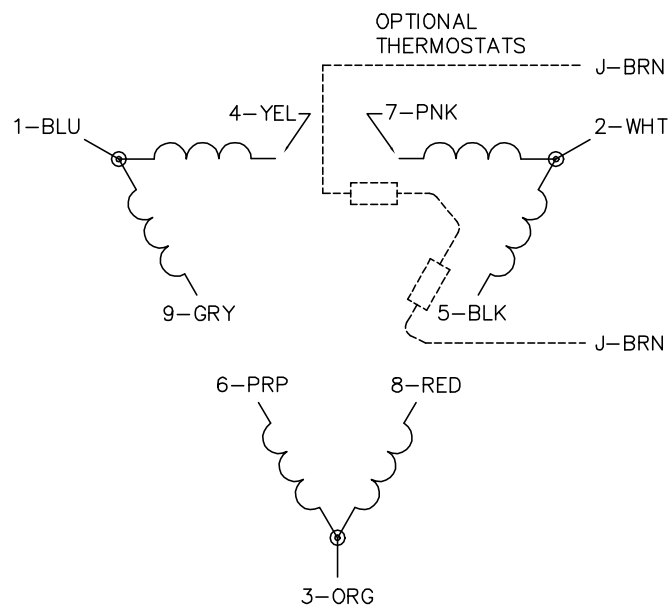
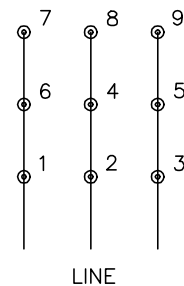
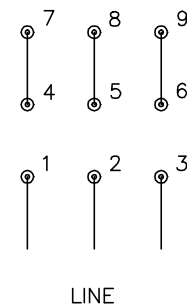
15 HP 3 PH 60 HZ 1175 RPM 460 V 1046M

TORQUES (LB-FT): PO=239 PU=72.8 LR=116 LRA=136





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.

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

SH 1 of 1

CD0180