

ABB BALDOR RELIANCE III

Customer information packet

EM4104T-8

30HP, 1770RPM, 3PH, 60HZ, 286T, 1056M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286T
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	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	200.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV NEMA PREMIUM (OLD LOGO)
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	84.000 A @ 200.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
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	84.0 a
Insulation Class	F

Part Detail

Revision	Z
Type	AC
Mech. spec.	10C151
Base	
Status	PRD/A
Elec. spec.	10WGY760
Layout	10LYC151
Eff. date	03-30-2026
CD Diagram	CD0695
Poles	04
Leads	6#6
Proprietary	False
Created date	04-29-2010

Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.76 IN
Power Factor	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Part Winding
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3443L												
CAT.NO.	EM4104T-8				CUST. P/N				ENCL			TEFC
SPEC.	10C151Y760G1	CC	010A	FRAME	286T	SER.NO.						
HP	30		CLASS	F	HZ	60						
R.P.M.	1770		PH	3	DES	A						
VOLTS	200		CODE		H	ODE BRG		6309	DE BRG	6311		
AMPS	84											
RATING	40C AMB-CONT		NEMA NOM. EFF.			93.6	GREASE		POLYREX EM			
P.F.	83	SER.F.	1.15	VPWM INVERTER READY								
HTR-VOLTS	HTR-AMPS		HTR-WATTS									

Accessories

Part number	Description	Multiplier
10-1305	C FACE KIT	A8
10EP1502A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 30993

Typical performance - not guaranteed values

Winding: 10WGY760-R001				Type: 1056M		Enclosure: TEFC	
Nameplate Data				200 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		30		Full Load Torque		89.13 LB-FT	
Volts		200		Start Configuration		direct on line	
Full Load Amps		81		Breakdown Torque		279 LB-FT	
R.P.M.		1770		Pull-up Torque		133 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		151 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		560 A
Service Factor (S.F.)		1.15		No-load Current		38.88 A	
NEMA Nom. Eff.		93.6	Power Factor	83	Line-line Res. @ 25°C		0.0415 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		57°C	
S.F. Amps				Temp. Rise @ S.F. Load		69°C	
				Locked-rotor Power Factor		31.6	
				Rotor inertia		4.45 LB-FT2	

Load Characteristics 200 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	73	82	82	82	82
Efficiency	90.3	93.6	94.3	94.1	93.3	93.1	93.7
Speed	1794	1787	1781	1775	1767	1758	1770
Line amperes	43.24	54.63	70.59	84.33	105	126	96.7

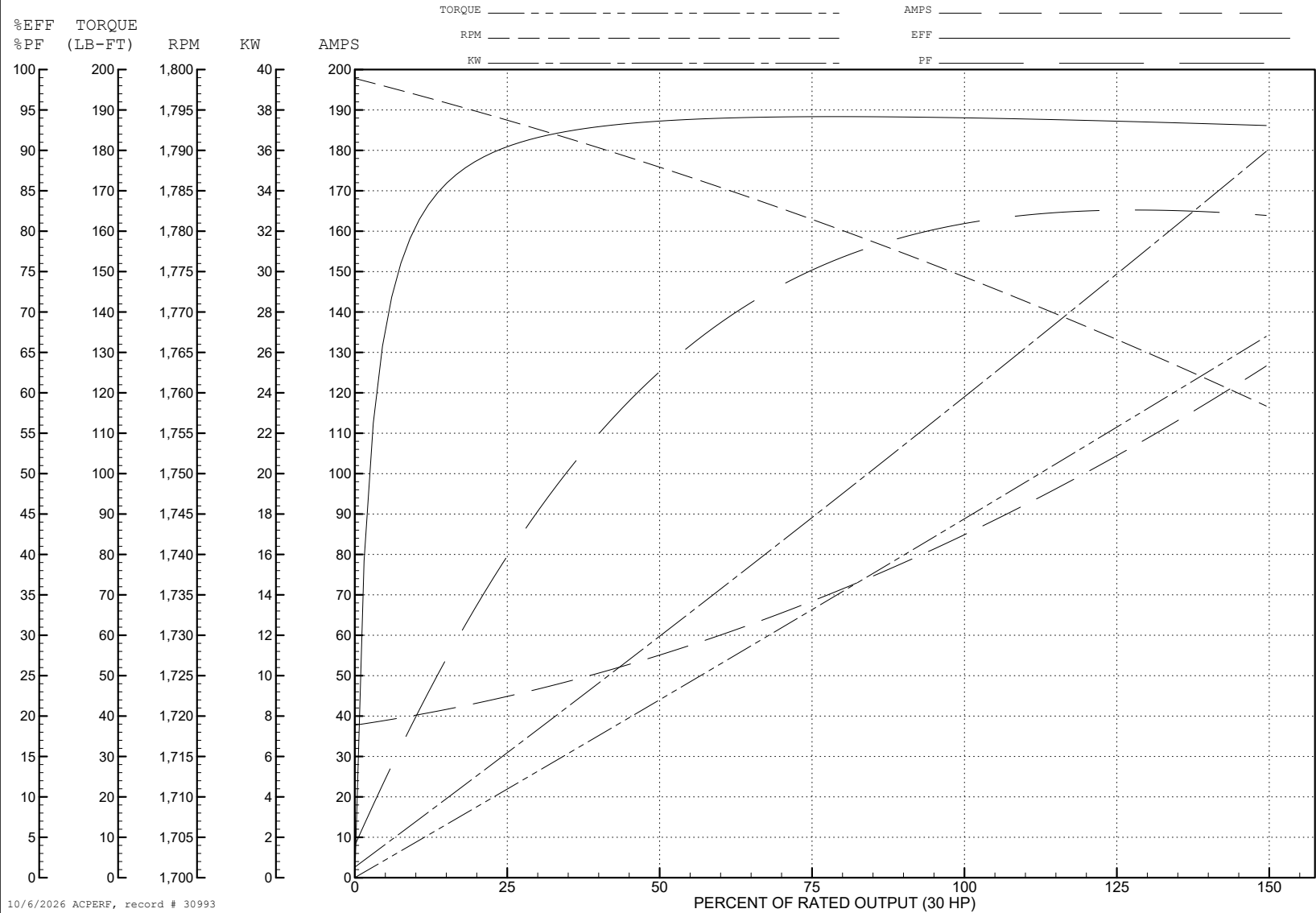
ABB Motors and Mechanical Inc.

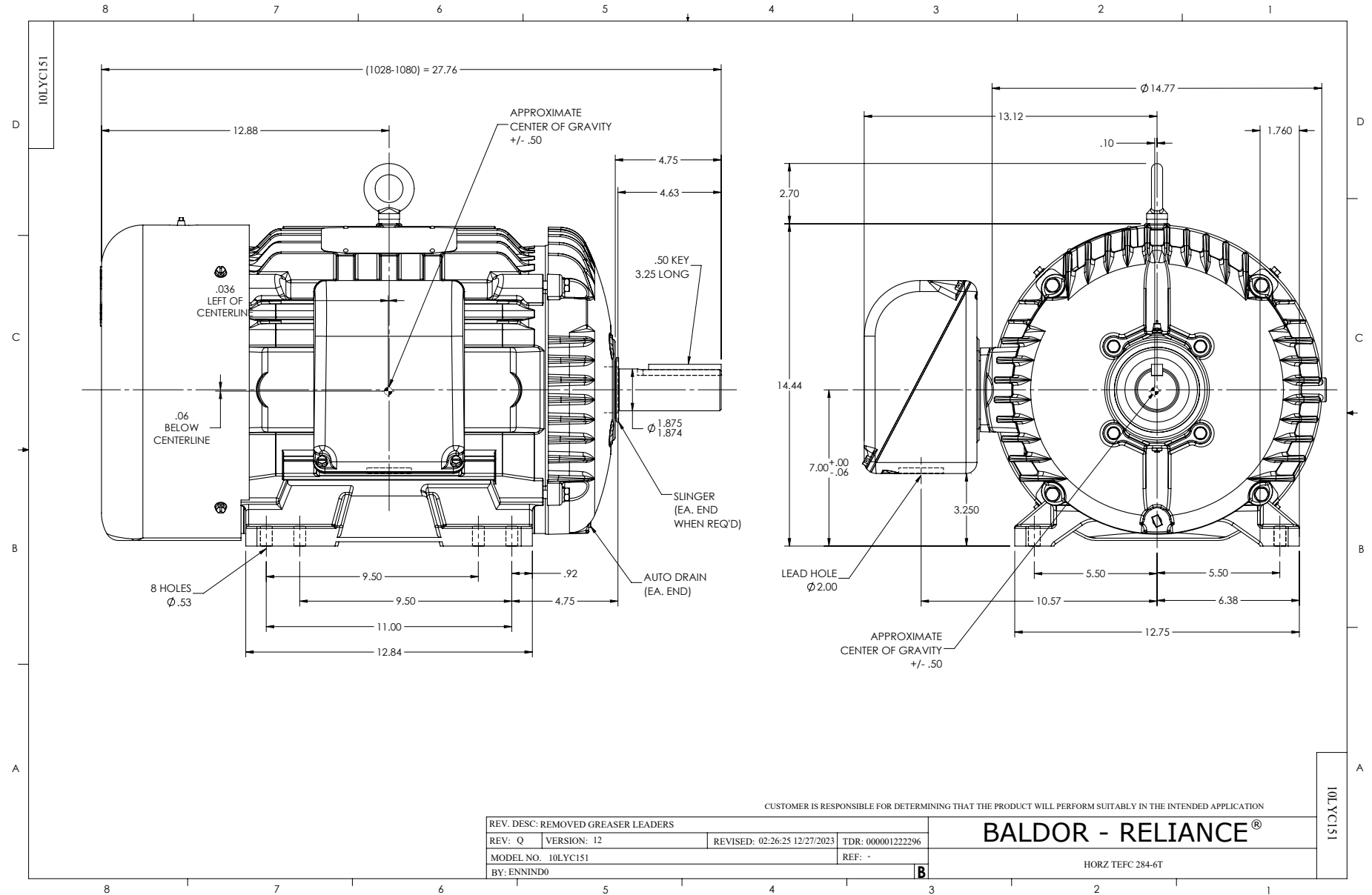
WINDING # 10WGY760

Typical performance - not guaranteed values.

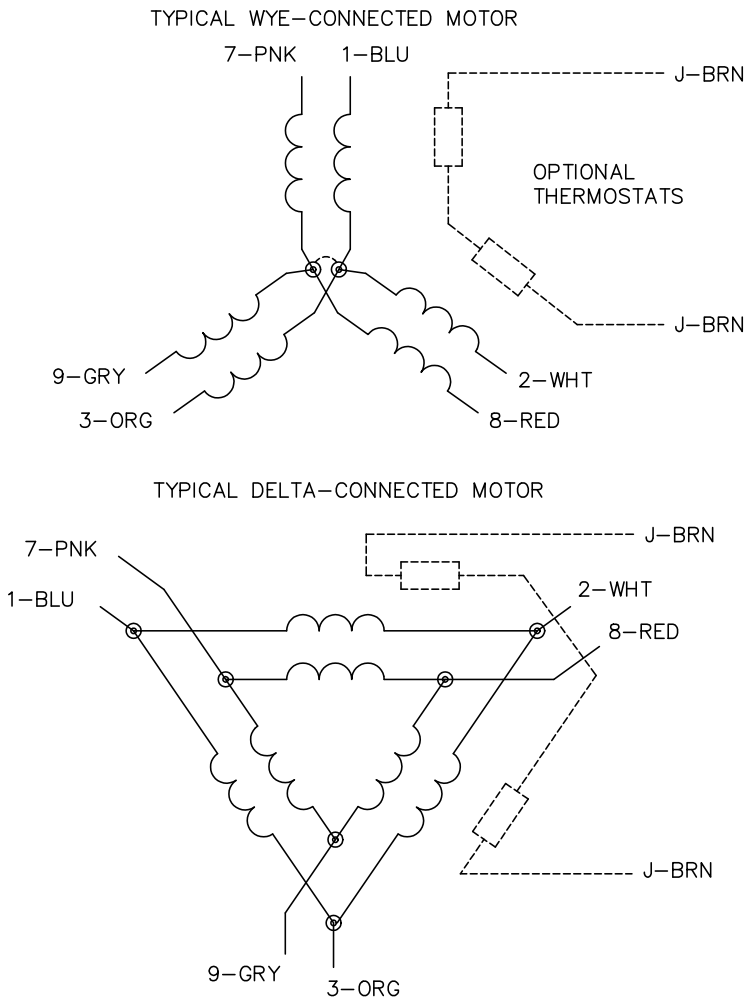
30 HP 3 PH 60 HZ 1770 RPM 200 V 1056M

TORQUES (LB-FT): PO=279 PU=133 LR=151 LRA=560

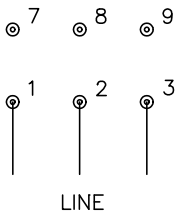




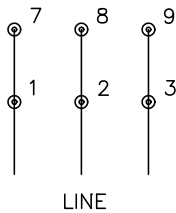
CD0695



START CONNECTION



RUN CONNECTION



NOTES:

1. MOTOR MAY BE WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: C

BY: JLP

REVISED: 01/21/99 3:19

TDR: 0171435

S69000

FILE: AAA00005151

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, PART WINDING START

CD0695