

ABB BALDOR RELIANCE III

Customer information packet

EM4104T-5G

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	575.0 V @ 60 HZ
Agency Approvals	UR CSA CSA EEV
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	29.000 A @ 575.0 V
Design Code	A
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	29.0 a
Insulation Class	H

Part Detail

Revision	AK
Type	AC
Mech. spec.	10H279
Base	
Status	PRD/A
Elec. spec.	10WGY759
Layout	10LYH279
Eff. date	07-24-2026
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	02-11-2011

Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 10 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
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	1770 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

NP3443L													
CAT.NO.	EM4104T-5G				CUST. P/N				ENCL				TEFC
SPEC.	10H279Y759G1		CC	010A	FRAME	286T		SER.NO.					
HP	30			CLASS	H	HZ	60						
R.P.M.	1770			PH	3	DES	A						
VOLTS	575			CODE	G		ODE BRG	6309	DE BRG	6311			
AMPS	29												
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										

AC Induction Motor Performance Data

Record # 50235

Typical performance - not guaranteed values

Winding: 10WGY759-R004			Type: 1056M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		30	Full Load Torque		89.2 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		29	Breakdown Torque		255 LB-FT		
R.P.M.		1770	Pull-up Torque		120 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		136 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		177 A
Service Factor (S.F.)		1.15	No-load Current		11.5 A		
NEMA Nom. Eff.		93.6	Power Factor	83	Line-line Res. @ 25°C		0.375 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		58°C
S.F. Amps			Temp. Rise @ S.F. Load		71°C		
			Locked-rotor Power Factor		32		
			Rotor inertia		4.45 LB-FT2		

Load Characteristics 575 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	69	77	84	84	83	84
Efficiency	90.9	93.9	94.4	94	92.9	92.5	93.4
Speed	1794	1786	1780	1773	1764	1754	1768
Line amperes	13.3	17.6	23.4	28.5	35.9	43.6	32.9

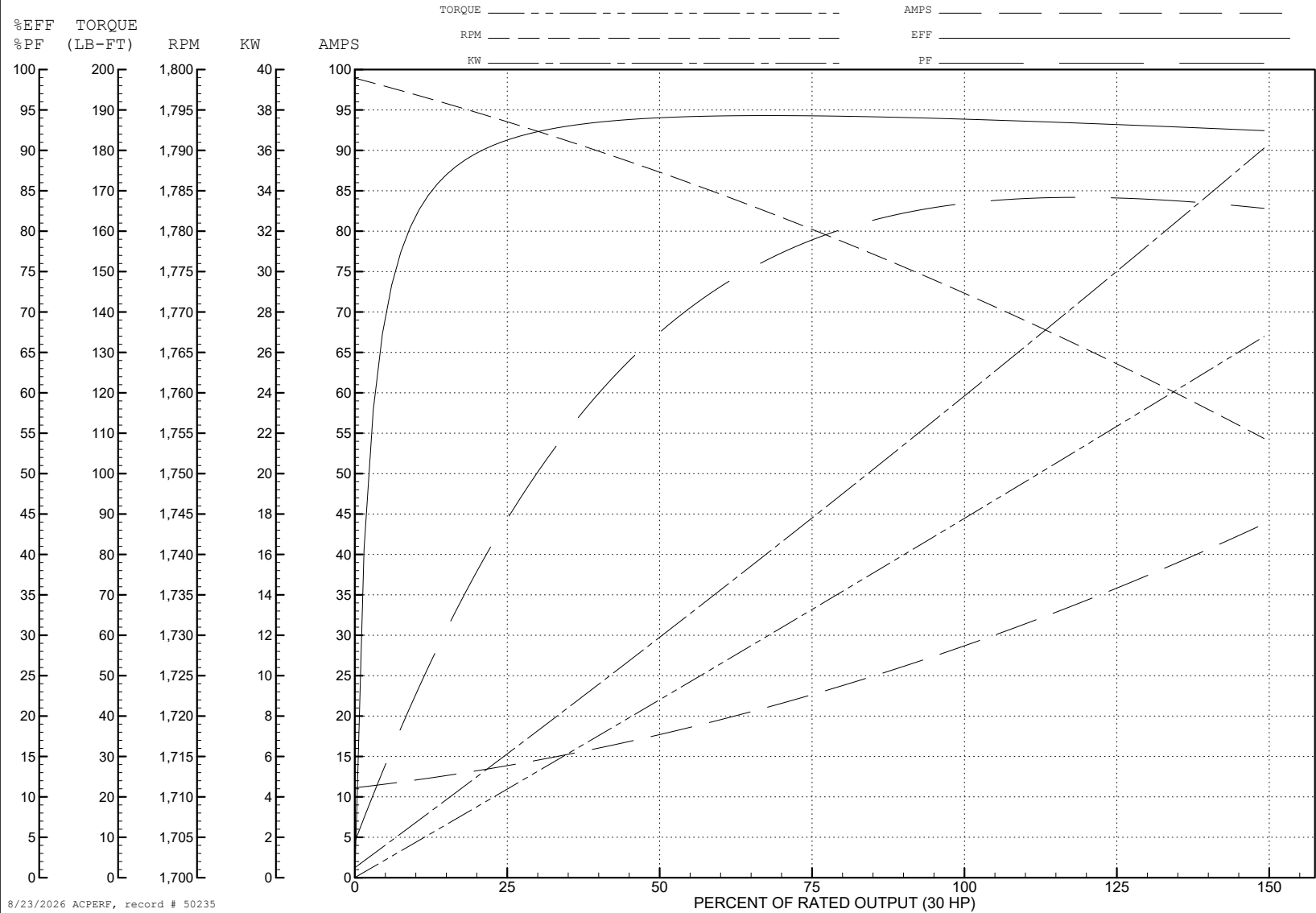
ABB Motors and Mechanical Inc.

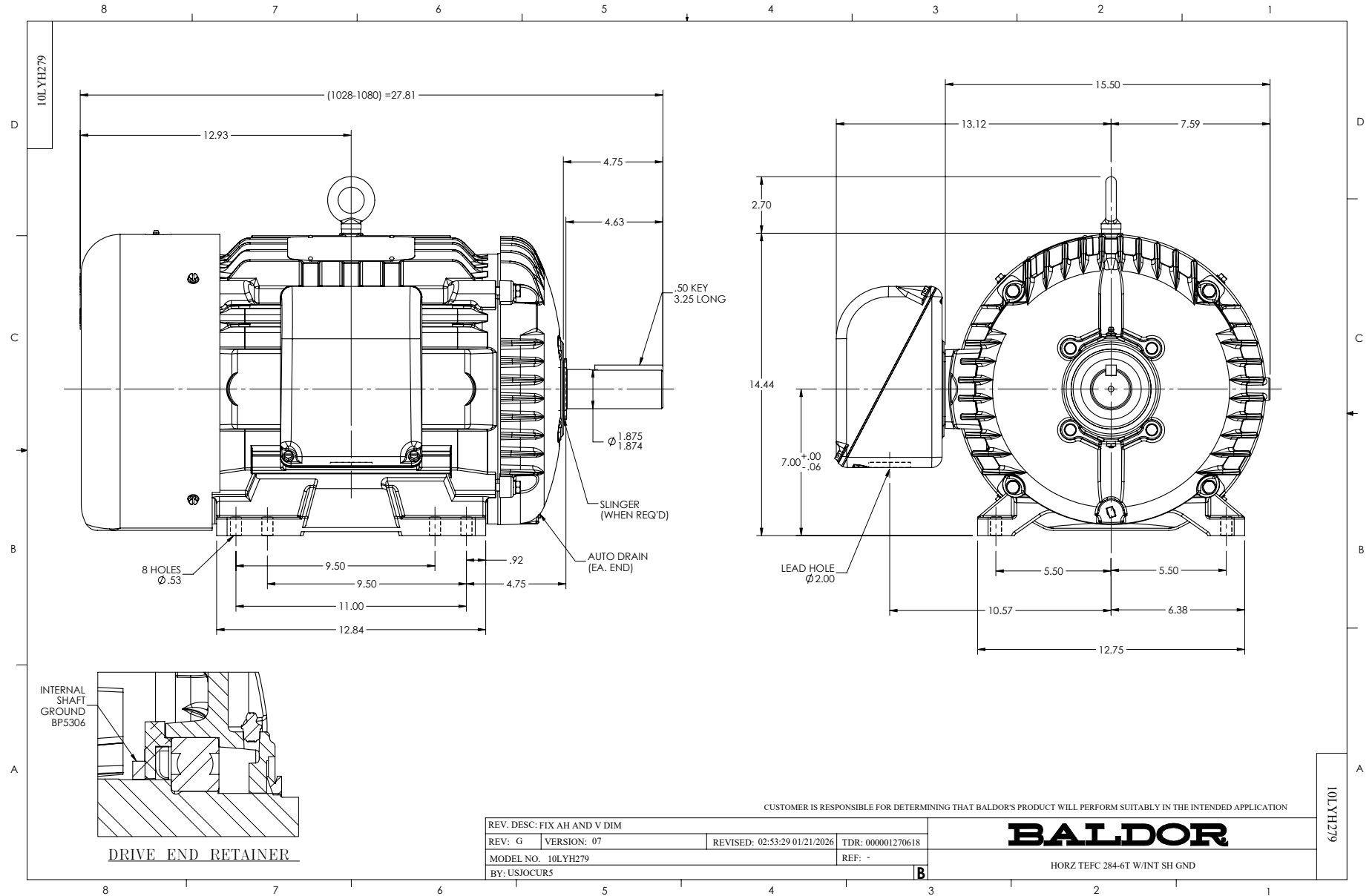
WINDING # 10WGY759

Typical performance - not guaranteed values.

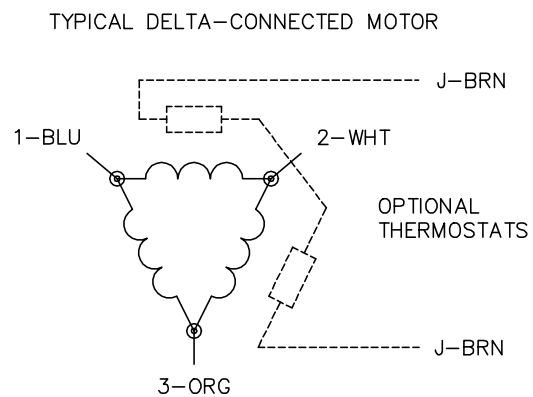
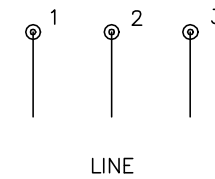
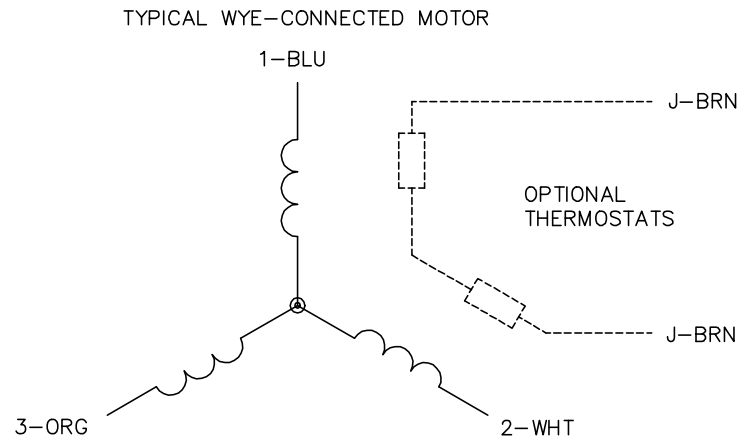
30 HP 3 PH 60 HZ 1770 RPM 575 V 1056M

TORQUES (LB-FT): PO=255 PU=120 LR=136 LRA=177





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER 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 BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -



BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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