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# Customer information packet

## EM4104T-12

30HP, 1760RPM, 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	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	36.000 A @ 460.0 V 72.000 A @ 230.0 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

## Part detail

Revision	X
Type	AC
Mech. spec.	10C151
Base	
Status	PRD/A
Elec. spec.	10WGY773
Layout	10LYC151
Eff. date	06-27-2024
CD Diagram	CD0104
Poles	04
Leads	12#8
Proprietary	False
Created date	08-03-2010

Heater Indicator	No Heater
High Voltage Full Load Amps	36.0 a
Insulation Class	F
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	12 @ 8 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	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	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1760 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

**Winding Thermal 2**

**None**

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**Nameplate**

**NP3443L**

<b>CAT.NO.</b>	EM4104T-12	<b>CUST. P/N</b>				<b>ENCL</b>	<b>TEFC</b>
<b>SPEC.</b>	10C151Y773G1	<b>CC</b>	010A	<b>FRAME</b>	286T	<b>SER.NO.</b>	
<b>HP</b>	30	<b>CLASS</b>		F	<b>HZ</b>	60	
<b>R.P.M.</b>	1760	<b>PH</b>	3	<b>DES</b>	A		
<b>VOLTS</b>	230/460	<b>CODE</b>		H	<b>ODE BRG</b>	6309	<b>DE BRG</b> 6311
<b>AMPS</b>	72/36						
<b>RATING</b>	40C AMB-CONT	<b>NEMA NOM. EFF.</b>			93.6	<b>GREASE</b>	POLYREX EM
<b>P.F.</b>	85	<b>SER.F.</b>	1.15	<b>VPWM INVERTER READY</b>			
<b>HTR-VOLTS</b>		<b>HTR-AMPS</b>		<b>HTR-WATTS</b>			

**AC Induction Motor Performance Data**

Record # 31378

Typical performance - not guaranteed values

<b>Winding: 10WGY773-R001</b>		<b>Type: 1056M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	30	<b>Full Load Torque</b>	88.8 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	72/36	<b>Breakdown Torque</b>	298 LB-FT		
<b>R.P.M.</b>	1760	<b>Pull-up Torque</b>	124 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	156 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	H	<b>Starting Current</b>	238 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	14 A		
<b>NEMA Nom. Eff.</b>	93.6 <b>Power Factor</b>	85	<b>Line-line Res. @ 25°C</b>	0.22 Ω	
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	65°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	79°C		
		<b>Locked-rotor Power Factor</b>	31		
		<b>Rotor inertia</b>	4.47 LB-FT <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 30 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	49	72	80	85	86	87	86
<b>Efficiency</b>	88.4	92.5	93.5	93.6	92.9	92	93.1
<b>Speed</b>	1792	1787	1781	1774	1767	1758	1770
<b>Line amperes</b>	16.2	21.2	28.2	35.5	44	54.1	40.6

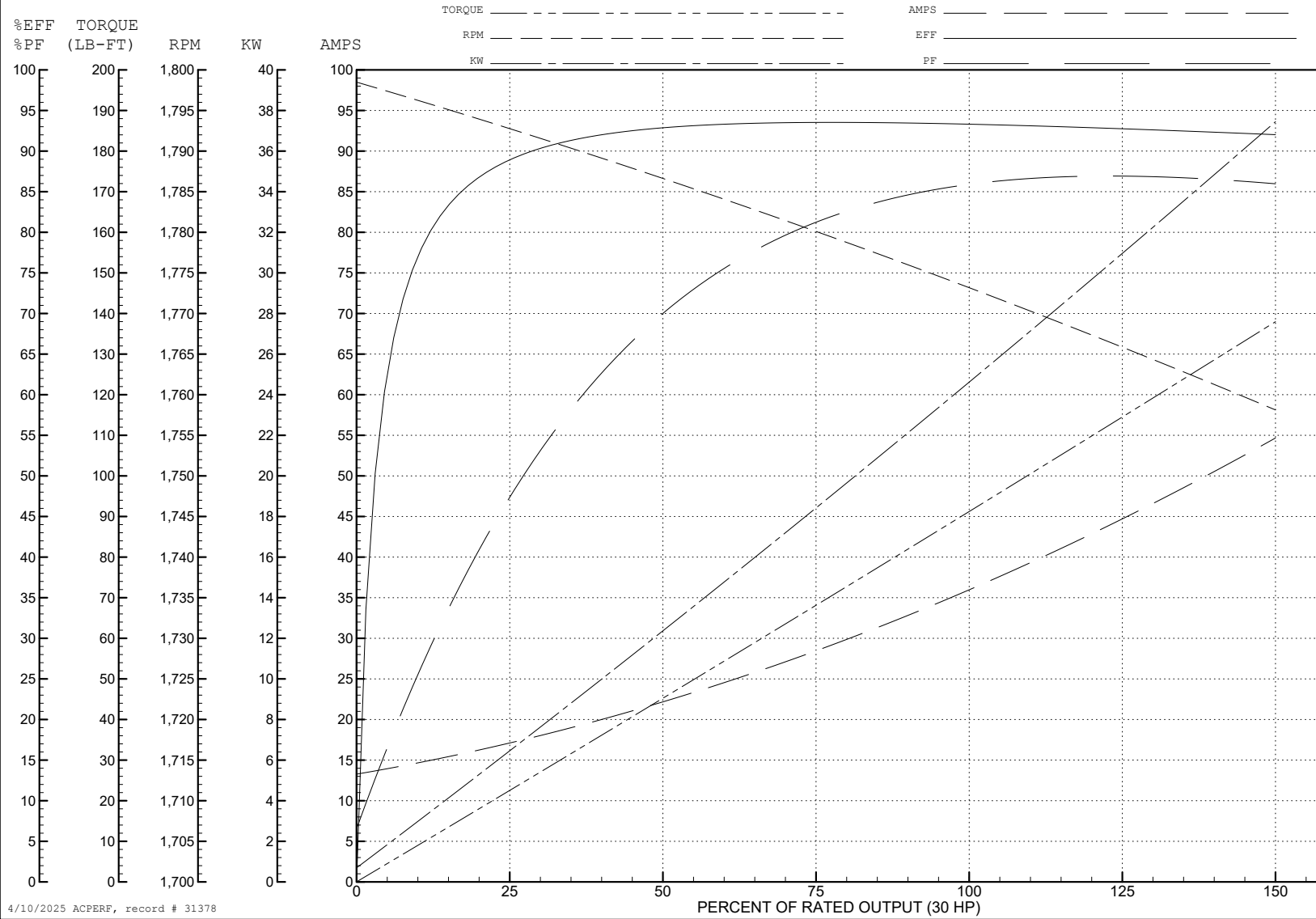
ABB Motors and Mechanical Inc.

WINDING # 10WGY773

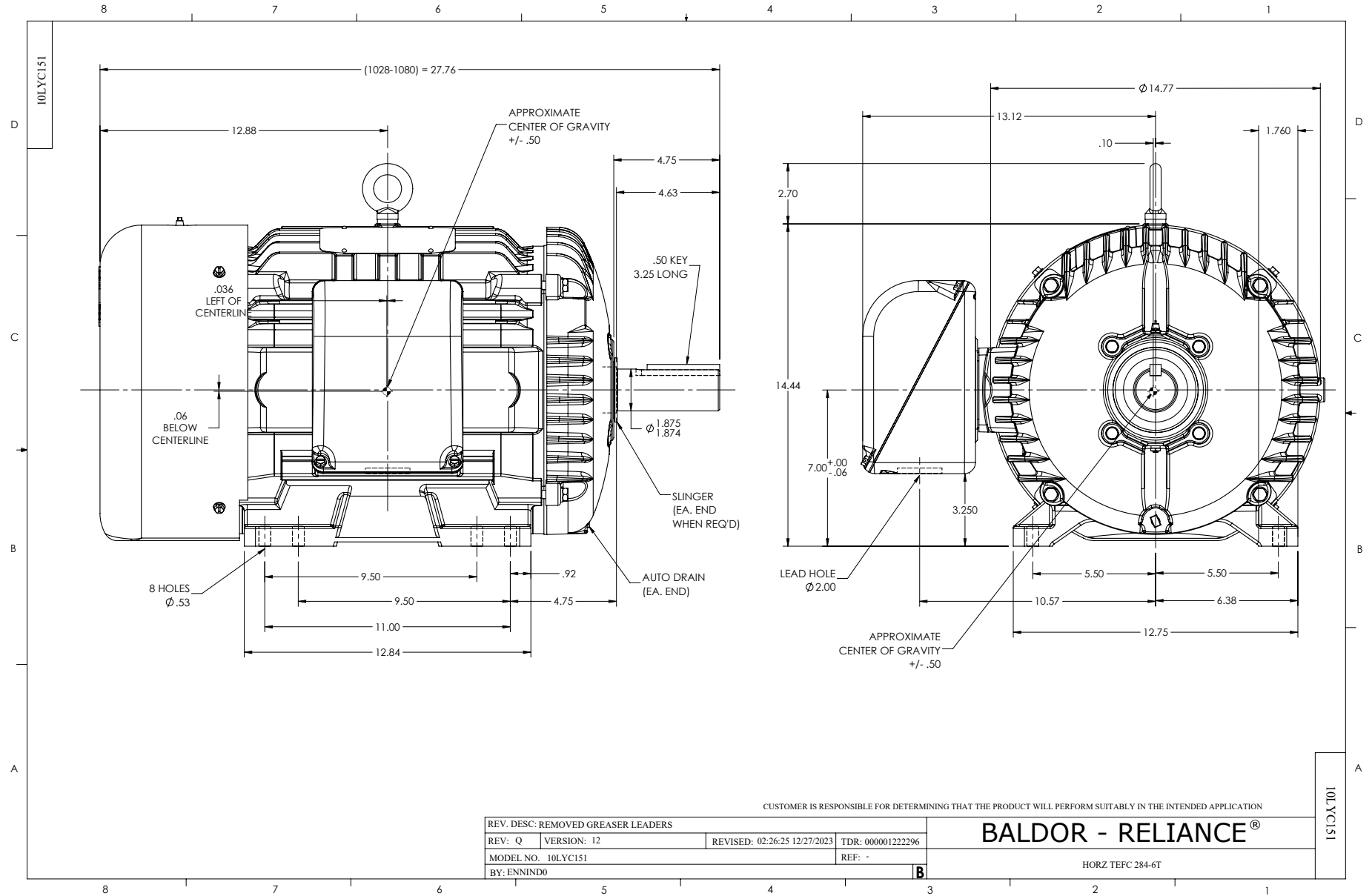
Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1760 RPM 460 V 1056M

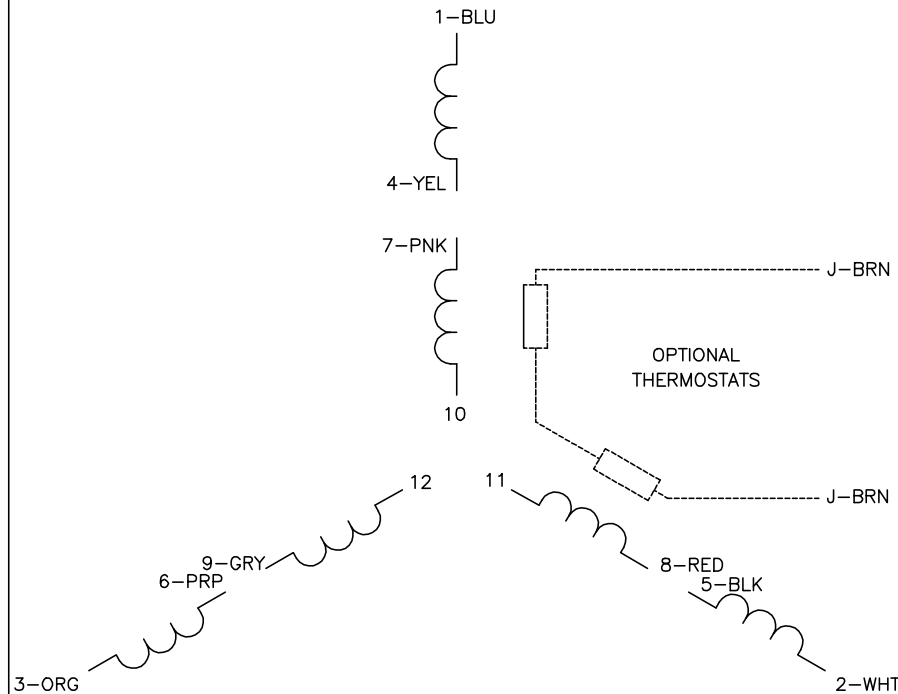
TORQUES (LB-FT): PO=298 PU=124 LR=156 LRA=238



4/10/2025 ACPERF, record # 31378

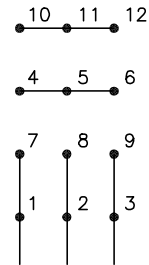


CD0104



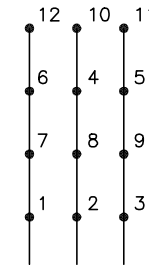
**LOW VOLTAGE**

START (2Y)



LINE

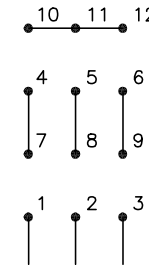
RUN (2D)



LINE

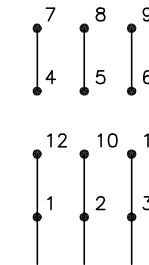
**HIGH VOLTAGE**

START (1Y)



LINE

RUN (1D)



LINE

**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.

CD0104

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00008\377	REVISED: 09:02:55 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 12 LEADS, Y START/D RUN

SH 1 of 1