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# Customer information packet

## EM4104T-BG

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
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
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA CSA EEV 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	76.000 A @ 208.0 V 76.000 A @ 230.0 V 38.000 A @ 460.0 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	W
Type	AC
Mech. spec.	10J470
Base	
Status	PRD/A
Elec. spec.	10WGY538
Layout	10LYJ470
Eff. date	08-01-2023
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	10-09-2013

Heater Indicator	No Heater
High Voltage Full Load Amps	38.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 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	80
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	1760 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**

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**Nameplate**

**NP3443LUA**

<b>CAT.NO.</b>	EM4104T-BG			<b>CUST. P/N</b>			<b>ENCL</b>	<b>TEFC</b>
<b>SPEC.</b>	10J470Y538G1	<b>CC</b>	010A	<b>FRAME</b>	286T		<b>SER.NO.</b>	
<b>HP</b>	30	<b>CLASS</b>	H	<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>	J	<b>ODE BRG</b>	6309	<b>DE BRG</b>	6311	
<b>AMPS</b>	76/38	<b>USABLE AT 208V</b>	N/A					
<b>RATING</b>	40C AMB-CONT	<b>NEMA NOM. EFF.</b>	93.6	<b>GREASE</b>	POLYREX EM			
<b>P.F.</b>	80	<b>SER.F.</b>	1.15	<b>CT6-60H(10:1)VT3-60H(20:1)</b>				
<b>USABLE AT</b>	50HZ 30HP 190/380V 88/44A			SF1.0				
<b>VOLTS</b>	<b>AMPS</b>	<b>MAX. SPACE HEATER TEMP.</b>						

**AC Induction Motor Performance Data**

Record # 35486

Typical performance - not guaranteed values

Winding: 10WGY538-R007		Type: 1056M		Enclosure: TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
Rated Output (HP)		30	Full Load Torque		88.7 LB-FT
Volts		230/460	Start Configuration		direct on line
Full Load Amps		76/38	Breakdown Torque		330 LB-FT
R.P.M.		1760	Pull-up Torque		142 LB-FT
Hz	60 Phase	3	Locked-rotor Torque		178 LB-FT
NEMA Design Code	A KVA Code	J	Starting Current		270 A
Service Factor (S.F.)		1.15	No-load Current		17.9 A
NEMA Nom. Eff.	93.6 Power Factor	80	Line-line Res. @ 25°C		0.19377 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		64°C
S.F. Amps			Temp. Rise @ S.F. Load		76°C
			Locked-rotor Power Factor		31
			Rotor inertia		4.47 LB-FT <sup>2</sup>

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

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	73	80	82	85	81
Efficiency	87.6	92.3	93.5	93.7	93.4	92.9	93.5
Speed	1792.2	1787.6	1782.4	1776.5	1770.3	1762.1	1773
Line amperes	19.8	24.3	30.7	37.6	45.6	55.2	42.4

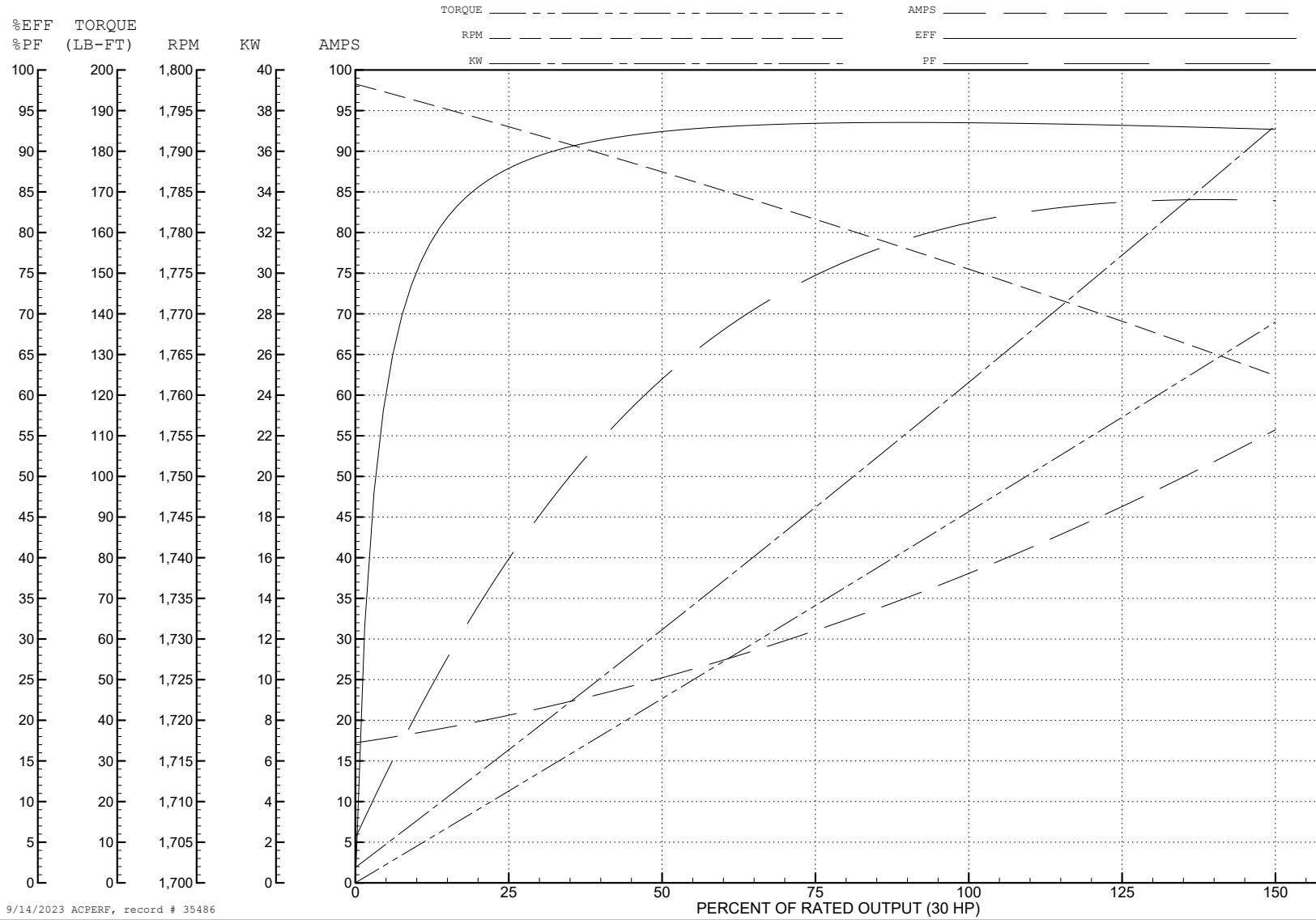
ABB Motors and Mechanical Inc.

WINDING # 10WGY538

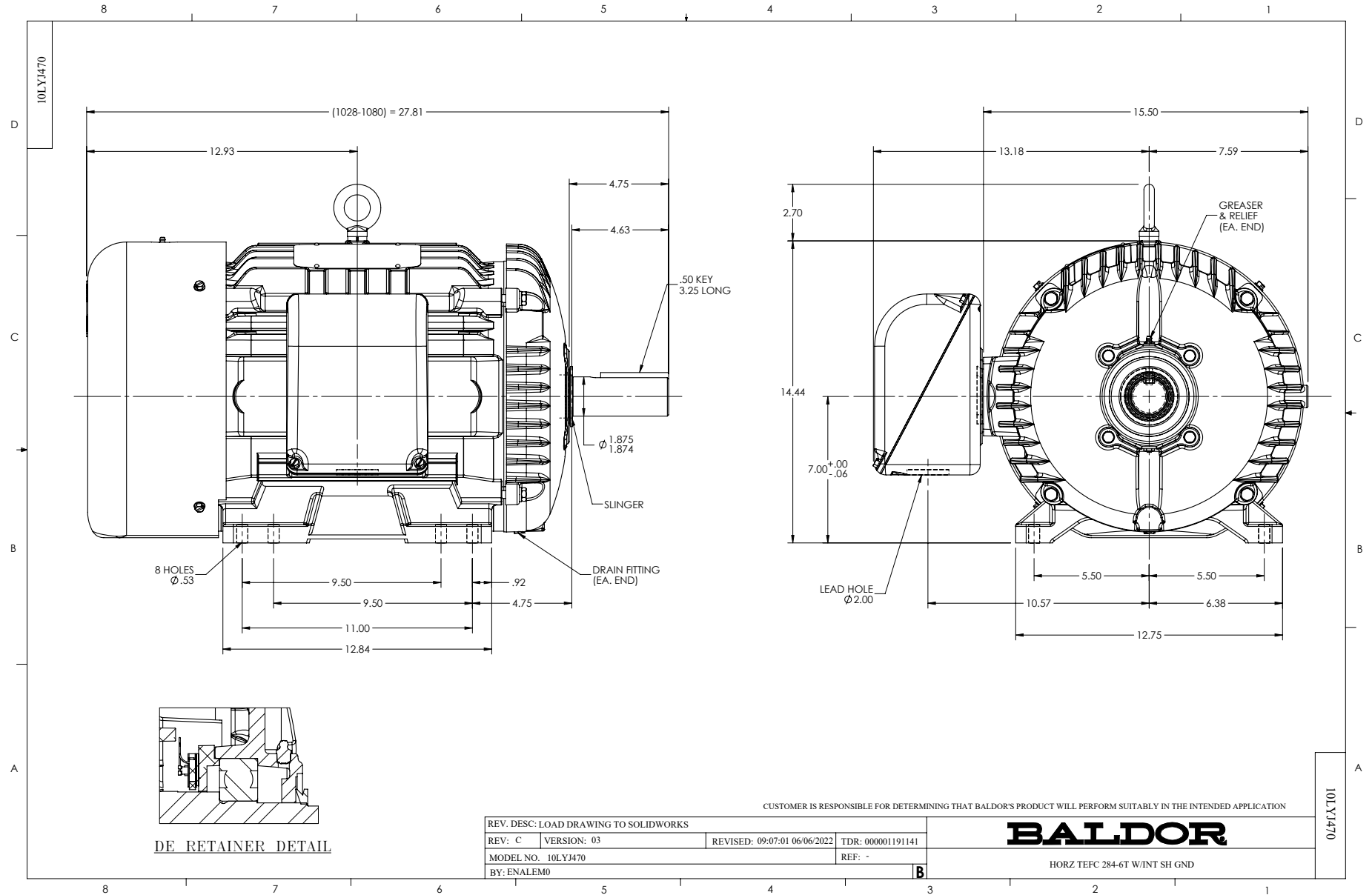
Typical performance - not guaranteed values.

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

TORQUES (LB-FT): PO=330 PU=142 LR=178 LRA=270

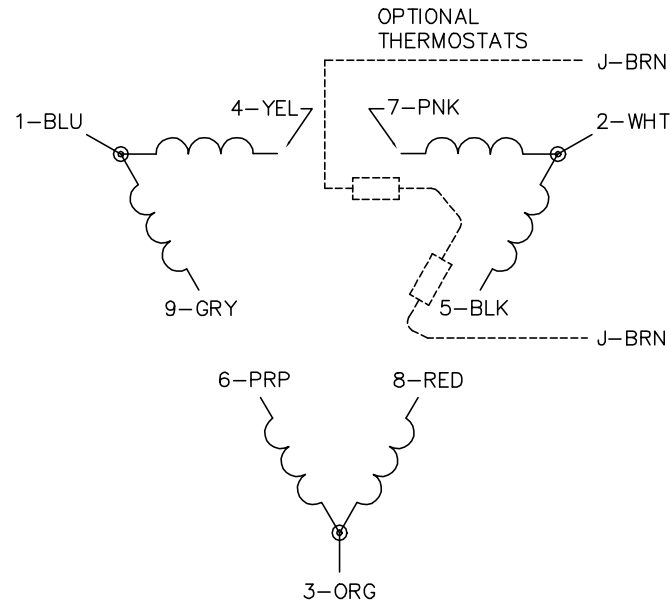


9/14/2023 ACPERF, record # 35486





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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