

**BALDOR • RELIANCE**

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# Customer information packet

## CEM4104T-G

30HP, 1760RPM, 3PH, 60HZ, 286TC, TEFC, F1

Class - None

Division - Not Applicable

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## Specifications

Enclosure	TEFC
Frame	286TC
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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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	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
Heater Indicator	No Heater
High Voltage Full Load Amps	38.0 a

## Part detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	10WGY538
Layout	10LYJ646
Eff. date	08-01-2023
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	12-16-2019

<b>Insulation Class</b>	H
<b>Inverter Code</b>	Inverter Duty
<b>IP Rating</b>	NONE
<b>KVA Code</b>	J
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	1056M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	27.76 IN
<b>Power Factor</b>	80
<b>Product Family</b>	General Purpose
<b>Pulley Face Code</b>	C-Face
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.875 IN
<b>Shaft Ground Indicator</b>	Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	1760 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

**NP3443LUA**

<b>CAT.NO.</b>	CEM4104T-G			<b>CUST. P/N</b>				<b>ENCL</b>	<b>TEFC</b>
<b>SPEC.</b>	10-0000581	<b>CC</b>	010A	<b>FRAME</b>	286TC		<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	Locked-rotor Torque	178 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	270 A	
Service Factor (S.F.)	1.15	No-load Current	17.9 A	
NEMA Nom. Eff.	93.6 Power Factor	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

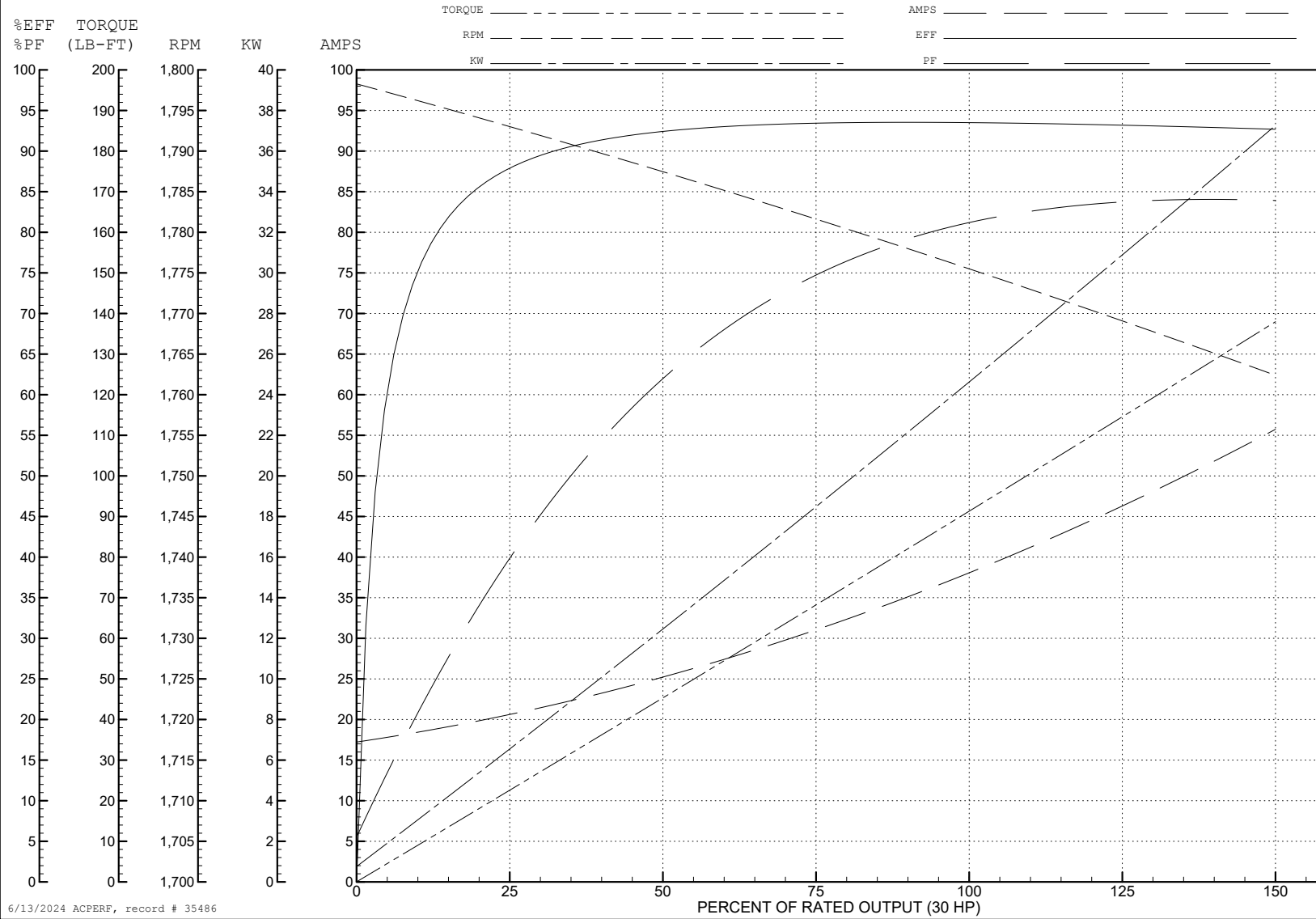
ABB Motors and Mechanical Inc.

WINDING # 10WGY538

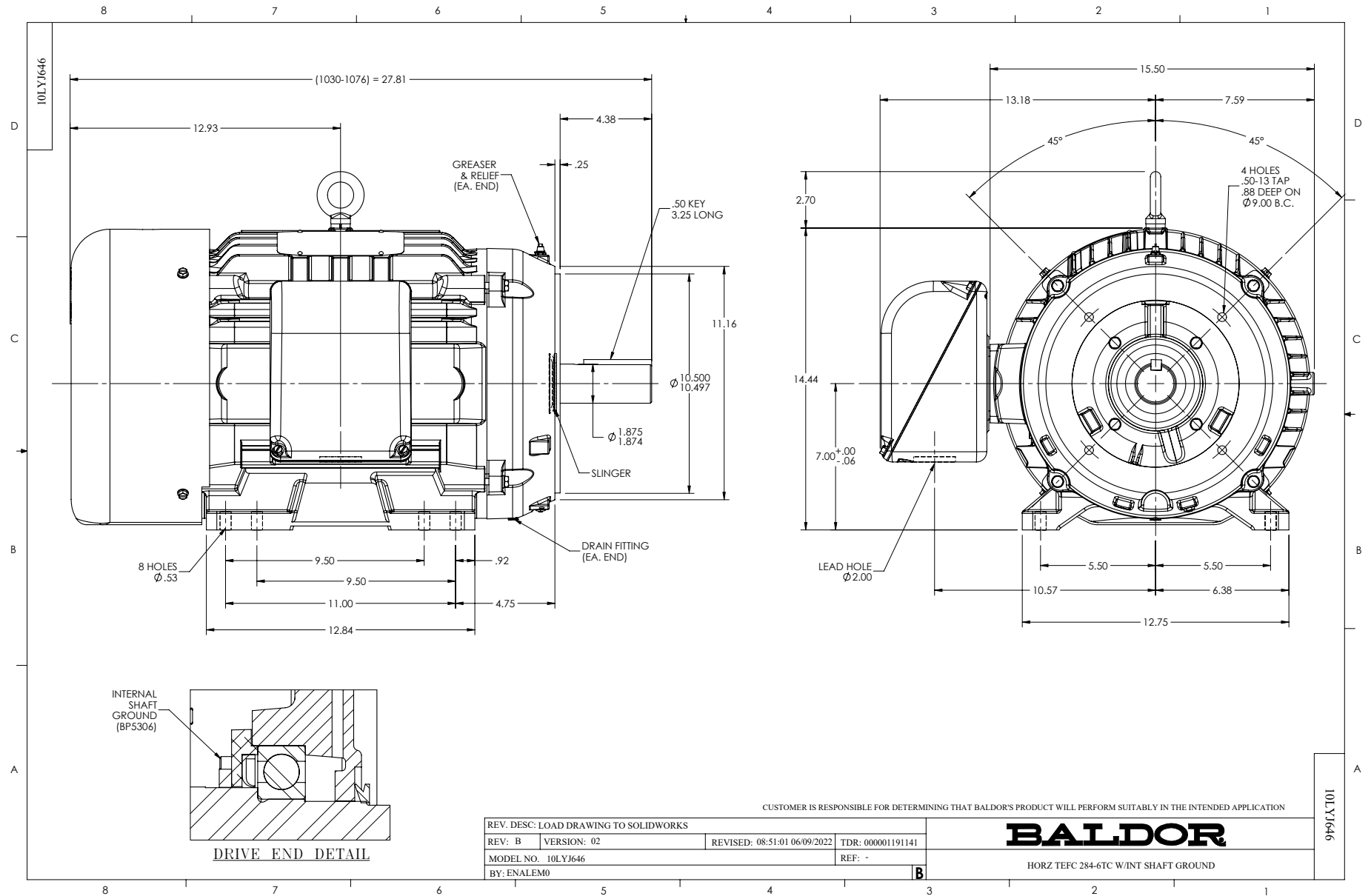
Typical performance - not guaranteed values.

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

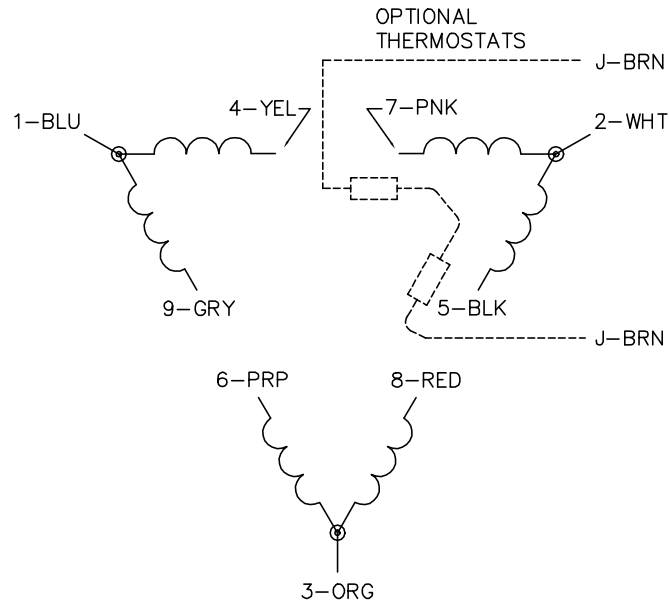
TORQUES (LB-FT): PO=330 PU=142 LR=178 LRA=270



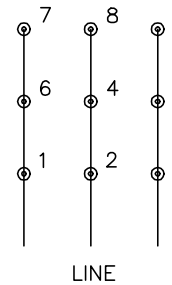
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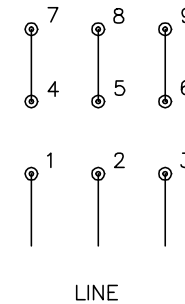
CD0180



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: -	© □	

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3PH, DV, 9 LEADS, DELTA CONNECTION

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