

BALDOR • RELIANCE

Customer information packet

CEM2559T-4

125HP, 1775RPM, 3PH, 60HZ, 405TC, 4488M, OPSB

Specifications

Enclosure	OPSB
Frame	405TC
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	125.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 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	143.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	143.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G

Part detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	44WGW047
Layout	44LYE013
Eff. date	08-01-2023
CD Diagram	CD0382
Poles	04
Leads	6#6
Proprietary	False
Created date	08-25-2021

Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4488M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	37.97 IN
Power Factor	86
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1775 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

Nameplate

NP2138L

CAT.NO.	CEM2559T-4	P/N		ENCLOSURE	OPSB		
SPEC.	44-0000-0088	CC	010A	FRAME	405TC	S/N	
HP	125	CLASS	F	HZ	60		
RPM	1775	PH	3	DES	B		
VOLT	460	KVA-CODE	G	ODE BRG	6312	DE BRG	6316
AMP	143	USABLE AT 208V	N/A				
RATING	40C AMB-CONT	GREASE	POLYREX EM				
NEMA-NOM-EFF	95.4	PF	86	SER.F.	1.15		
	380V, 100HP, 50HZ, 138A, 1.15SF						
HTR-VOLTS		HTR-AMPS					

AC Induction Motor Performance Data

Record # 13893

Typical performance - not guaranteed values

Winding: 44WGW047-R001		Type: 4488M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	125	Full Load Torque	369 LB-FT		
Volts	460	Start Configuration	direct on line		
Full Load Amps	143	Breakdown Torque	1004 LB-FT		
R.P.M.	1775	Pull-up Torque	454 LB-FT		
Hz	60	Locked-rotor Torque	540 LB-FT		
NEMA Design Code	Phase 3	Starting Current	914 A		
Service Factor (S.F.)	1.15	No-load Current	46 A		
NEMA Nom. Eff.	95.4	Line-line Res. @ 25°C	0.0379 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	48°C		
S.F. Amps		Temp. Rise @ S.F. Load	64°C		
		Locked-rotor Power Factor	25.5		
		Rotor inertia	16.6 lb-ft ²		

Load Characteristics 460 V, 60 Hz, 125 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	77	84	86	87	86	87
Efficiency	93.5	95.5	95.7	95.4	94.9	94.1	95.1
Speed	1794	1789	1783	1777	1770	1762	1773
Line amperes	56.3	79.8	109.4	142.6	177.7	216	163.7

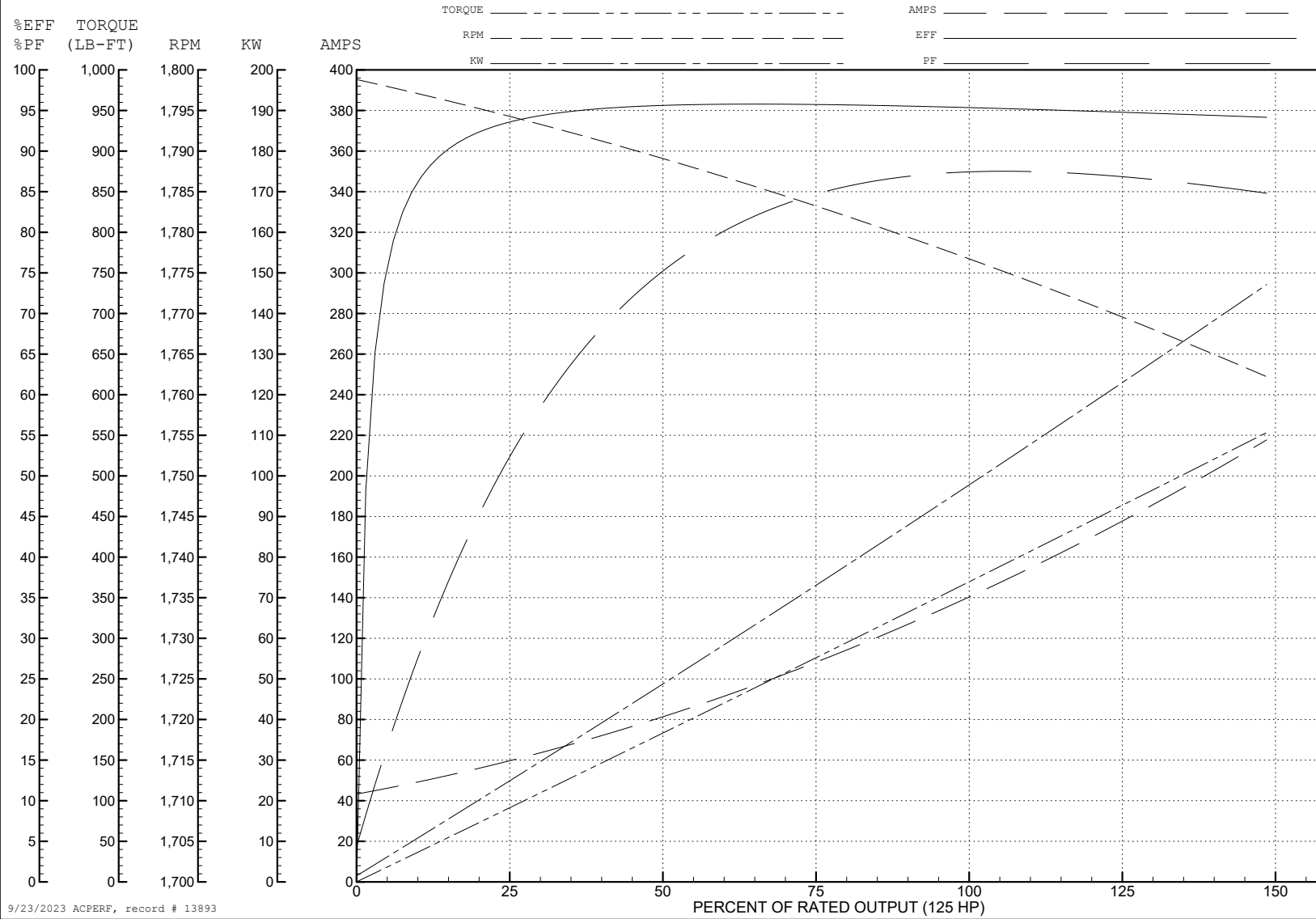
ABB Motors and Mechanical Inc.

WINDING # 44WGW047

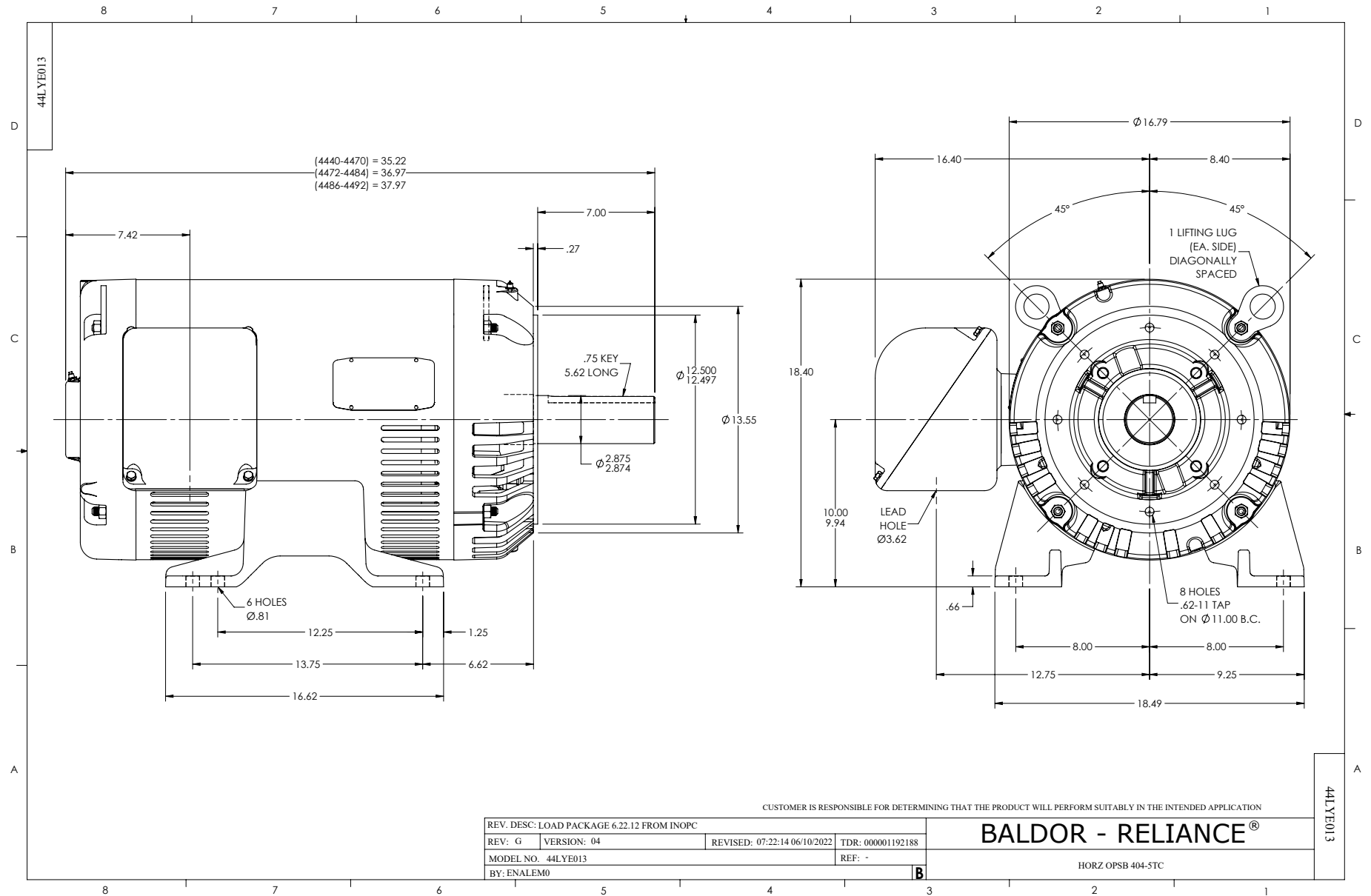
Typical performance - not guaranteed values.

125 HP 3 PH 60 HZ 1775 RPM 460 V 4488M

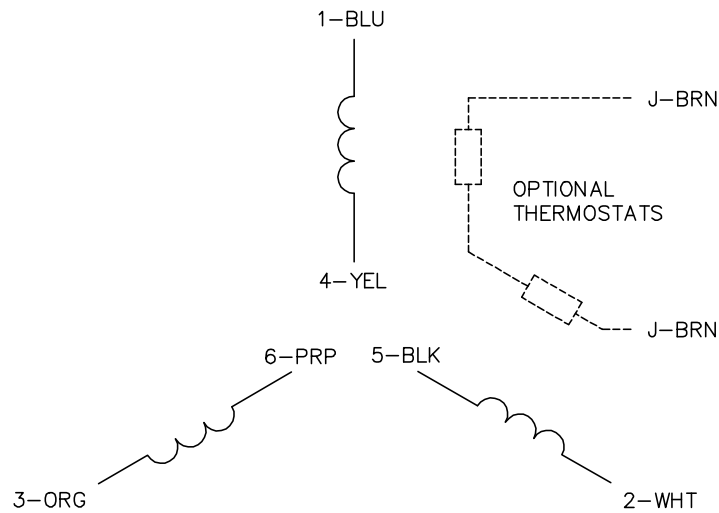
TORQUES (LB-FT): PO=1004 PU=454 LR=540 LRA=914



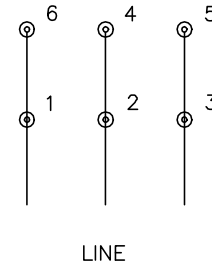
9/23/2023 ACPERF, record # 13893



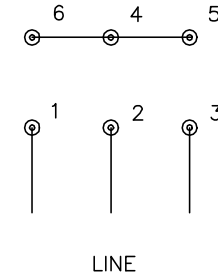
CD0382



RUN CONNECTION (1D)



START CONNECTION (1Y)



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.
5. FOR ACROSS-THE-LINE STARTING, USE 'RUN' CONNECTION.

CD0382

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: F	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\243	REVISED: 09:05:32 02/19/2019	BY: ENBRIRO
MTL: -	© □	

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3PH, SV, 6 LEADS, Y START/D RUN

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