

ABB BALDOR RELIANCE III

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	CURUSEEV
	NEMA PREMIUM
	NEMA PREMIUM (OLD LOGO)
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	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
Lifting Lugs	Standard Lifting Lugs

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	44WGW047
Layout	44LYE013
Eff. date	11-19-2024
CD Diagram	CD0382
Poles	04
Leads	6#6
Proprietary	False
Created date	08-25-2021

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																
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	Phase	3	Locked-rotor Torque		540 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		914 A
Service Factor (S.F.)		1.15	No-load Current		46 A		
NEMA Nom. Eff.		95.4	Power Factor	86	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-ft²	

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

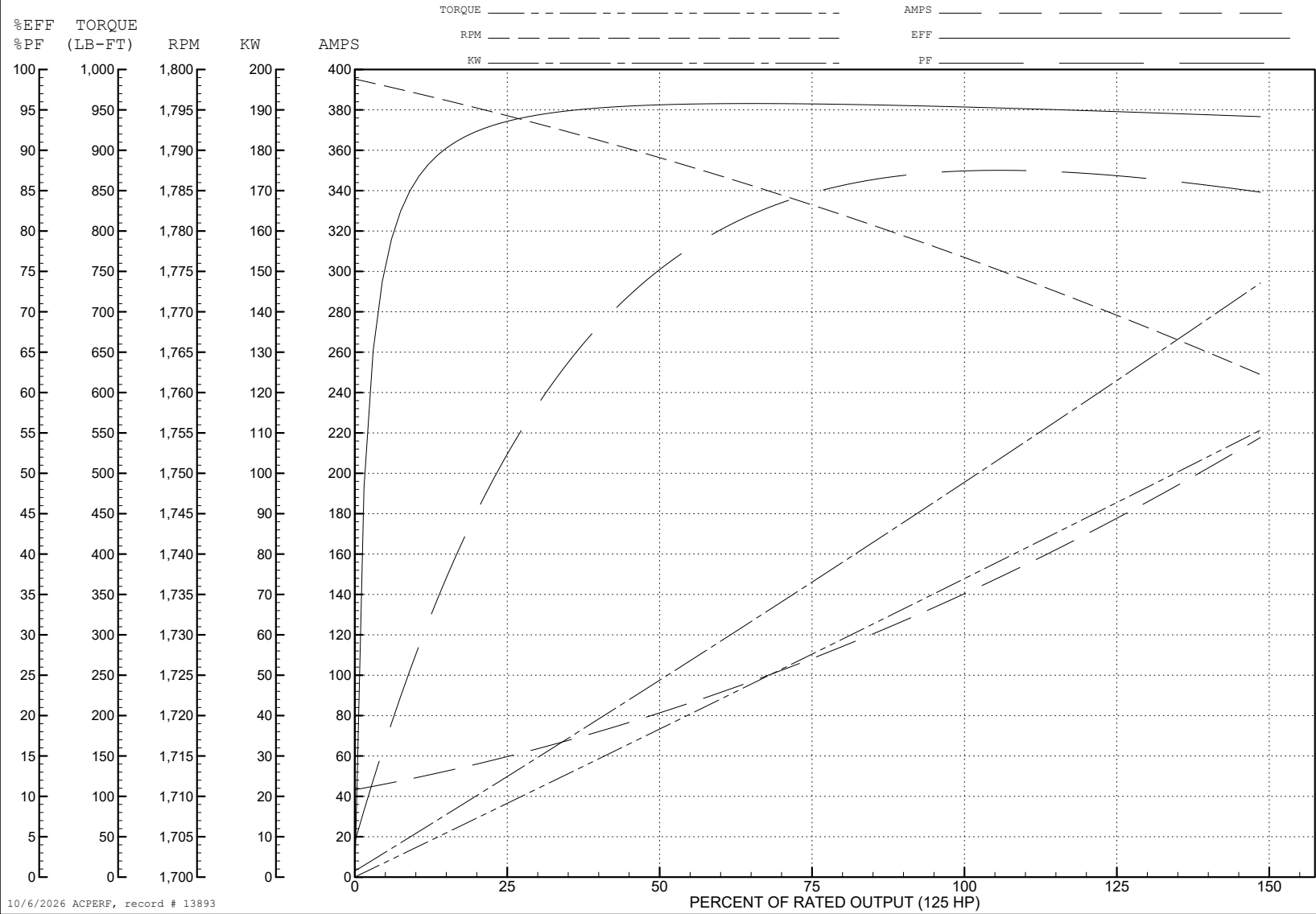
ABB Motors and Mechanical Inc.

WINDING # 44WG047

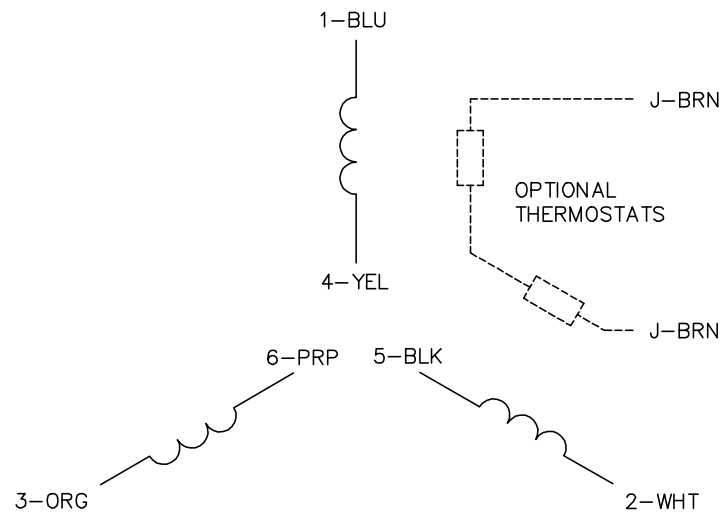
Typical performance - not guaranteed values.

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

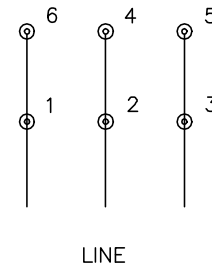
TORQUES (LB-FT): PO=1004 PU=454 LR=540 LRA=914



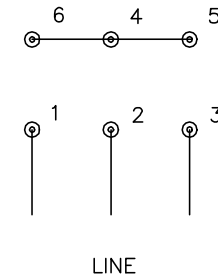
CD0382



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.

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: -



BALDOR - RELIANCE®

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

SH 1 of 1

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