

BALDOR • RELIANCE

Customer information packet

EM2543T-8

50HP, 1775RPM, 3PH, 60HZ, 326T, 4256M, OPSB, F1

Specifications

Enclosure	OPSB
Frame	326T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	200.0 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	131.000 A @ 208.0 V 132.000 A @ 200.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	132.0 a
Insulation Class	F

Part detail

Revision	AG
Type	AC
Mech. spec.	42F56
Base	
Status	PRD/A
Elec. spec.	42WGW479
Layout	42LYF056
Eff. date	06-27-2024
CD Diagram	CD0695
Poles	04
Leads	6#6
Proprietary	False
Created date	01-01-0001

Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4256M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.69 IN
Power Factor	87
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	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Part Winding
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3554L

CAT.NO.	EM2543T-8	P/N		ENCL	OPSB
SPEC.	42F056W479	CC	010A	FRAME	326T
HP	50	CLASS	F	HZ	60
RPM	1775	PH	3	DES	A
VOLTS	200	CODE	G	ODE BRG	6311
AMPS	132	DE BRG	6312		
RATING	40C AMB-CONT	NEMA-NOM-EFF	94.5	GREASE	POLYREX EM
PF	87	SER.F.	1.15	VPWM INVERTER READY	
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.			

Accessories

Part number	Description	Multiplier
42-1300	C FACE KIT	A8
42EP1601A01	SP'L D-FLANGE MTD. PU. E.P. MDL.42 W/BFL	

AC Induction Motor Performance Data

Record # 13698

Typical performance - not guaranteed values

Winding: 42WGW479-R001		Type: 4256M		Enclosure: OPSB	
Nameplate Data			200 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	50	Full Load Torque	148 LB-FT		
Volts	200	Start Configuration	direct on line		
Full Load Amps	132	Breakdown Torque	423 LB-FT		
R.P.M.	1775	Pull-up Torque	234 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	283 LB-FT	
NEMA Design Code	A KVA Code	G	Starting Current	877 A	
Service Factor (S.F.)	1.15	No-load Current	48 A		
NEMA Nom. Eff.	94.5 Power Factor	87	Line-line Res. @ 25°C	0.0235 Ω	
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	36°C	
S.F. Amps			Temp. Rise @ S.F. Load	43°C	
			Locked-rotor Power Factor	27	
			Rotor inertia	7.46 LB-FT ²	

Load Characteristics 200 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	70	80	87	86	86	86
Efficiency	90	93.6	94.4	94.5	94.1	94	94.3
Speed	1795	1790	1785	1779	1774	1768	1776
Line amperes	64	83	108	132	166	200	152.4

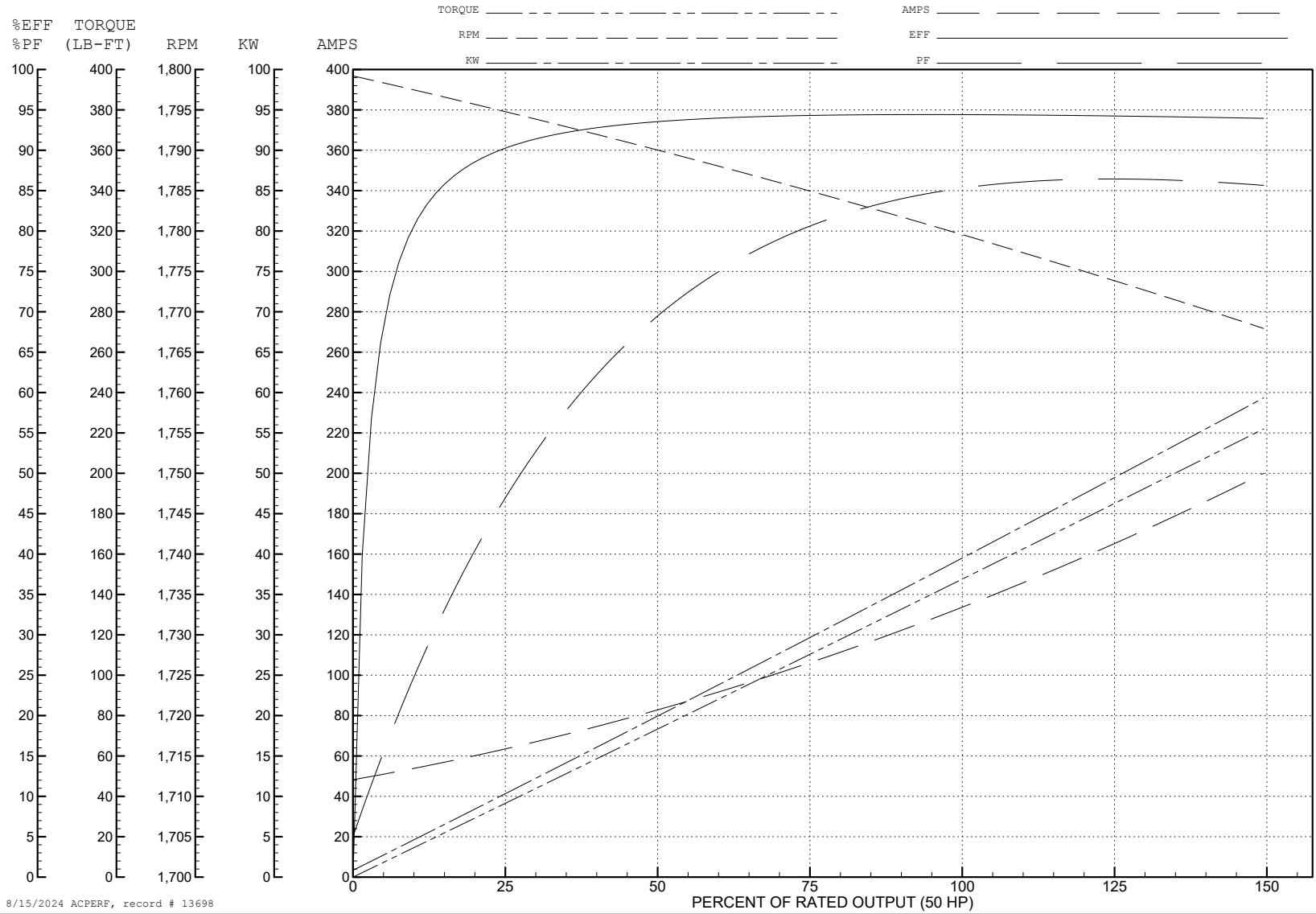
ABB Motors and Mechanical Inc.

WINDING # 42WGW479

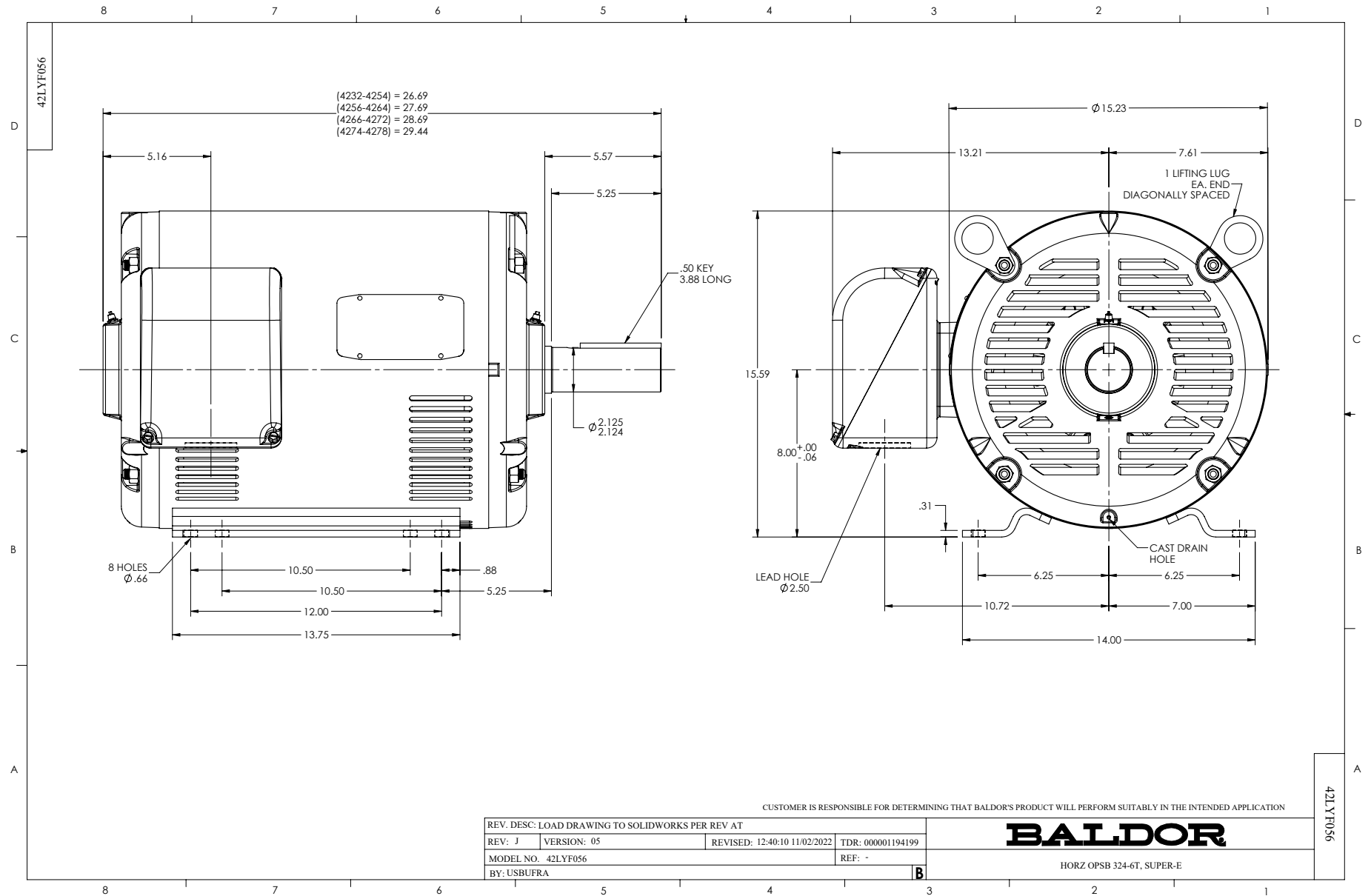
Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 1775 RPM 200 V 4256M

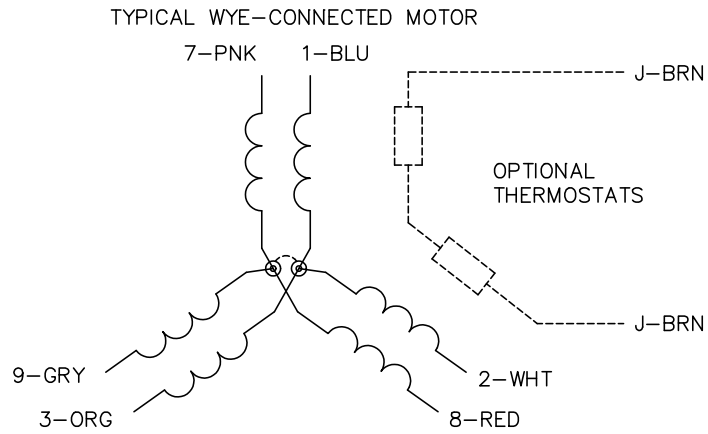
TORQUES (LB-FT): PO=423 PU=234 LR=283 LRA=877



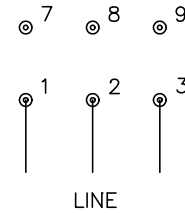
8/15/2024 ACPERF, record # 13698



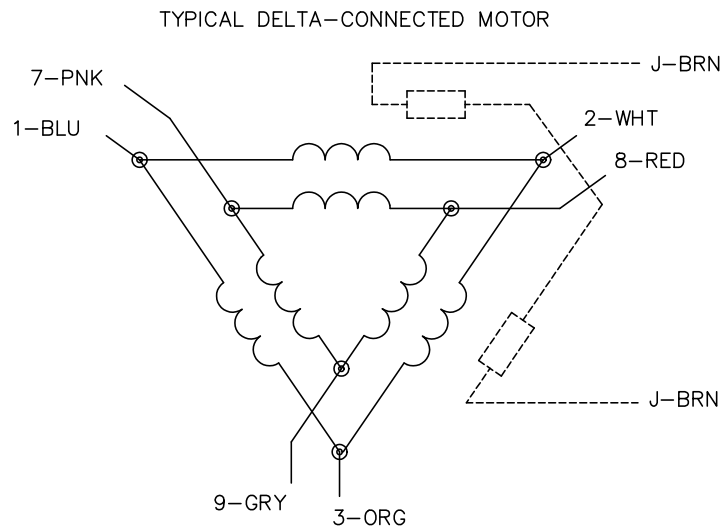
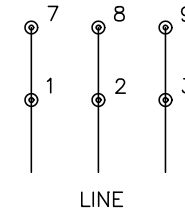
CD0695



START CONNECTION



RUN CONNECTION



NOTES:

1. MOTOR MAY BE WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0695

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: C	BY: JLP	REVISED: 01/21/99 3:19	TDR: 0171435
S69000		FILE: AAA00005151	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, PART WINDING START