

ABB BALDOR RELIANCE III

Customer information packet

EHM2543T-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
	UR
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	132.000 A @ 200.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
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
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing

Part Detail

Revision	V
Type	AC
Mech. spec.	42H068
Base	
Status	PRD/A
Elec. spec.	42WGW707
Layout	42LYH068
Eff. date	07-10-2024
CD Diagram	CD0006
Poles	04
Leads	3#2
Proprietary	False
Created date	10-07-2010

Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 2 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	Mounting Provisions Only
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP2094E06B03									
CAT.NO.	EHM2543T-8								
SPEC.	42H068W707G1								
HP	50								
VOLTS	200								
AMPS	132								
RPM	1775								
FRAME	326T		HZ	60		PH	3		
SER.F.	1.15	CODE	G	DES	B	CL	F		
NEMA-NOM-EFF	94.5	PF	87						
RATING	40C AMB-CONT								
CC	010A		USABLE AT 208V			N/A			
DE	6312		ODE	6311					
AUTO		MANUAL		NONE					
ENCL	OPSB	SN							
BLANK									

Parts List

Part number	Description	Quantity
SA204667	SA 42H068W707G1	1.000 ea
RA191911	RA 42H068W707G1	1.000 ea
HA6360	LIFTING LUG FOR 42 FRAME MOTORS.	2.000 ea
42CB4000A01	CONDUIT BOX 40, STAMPED	1.000 ea
51XF2520A08	SCREW,1/4-20X1/2 TAPTITE-II OR ROLOC 91	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
418199008A	N/P GRD I/D	1.000 ea
42EP3200A01	FR ENDPLATE, MACH	1.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
42EP3200B13	PUEP, MACH FOR 1/2 SH GND MTG	1.000 ea
84XN0632J08	#6-32 X .50 SOCK HD, BK OX	2.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	8.000 ea
42CB4500A01	CONDUIT BOX LID 42, STAMPED, W/ PRIMER	1.000 ea
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	2.000 ea
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
84XN0540J08	5-40 X 1/2" SHCS, BLACK OXIDE	3.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.080 ga
HA3151A03	THRUBOLT STUD 1/2-13 X 20.5	4.000 ea
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 ea
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP2094E06B03	NP LABEL W/BARCODE (PREM EFF HVAC MTR)	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea

AC Induction Motor Performance Data

Record # 35578

Typical performance - not guaranteed values

Winding: 42WGW707-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		425 LB-FT
R.P.M.		1775	Pull-up Torque		225 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	284 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	881 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	0.0234 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-FT2

Load Characteristics 200 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	69	79	87	86	86	86
Efficiency	89.8	93.4	94.2	94.5	94.2	93.8	94.3
Speed	1795	1790	1785	1780	1774	1768	1776
Line amperes	65	84	109	132	167	200	153

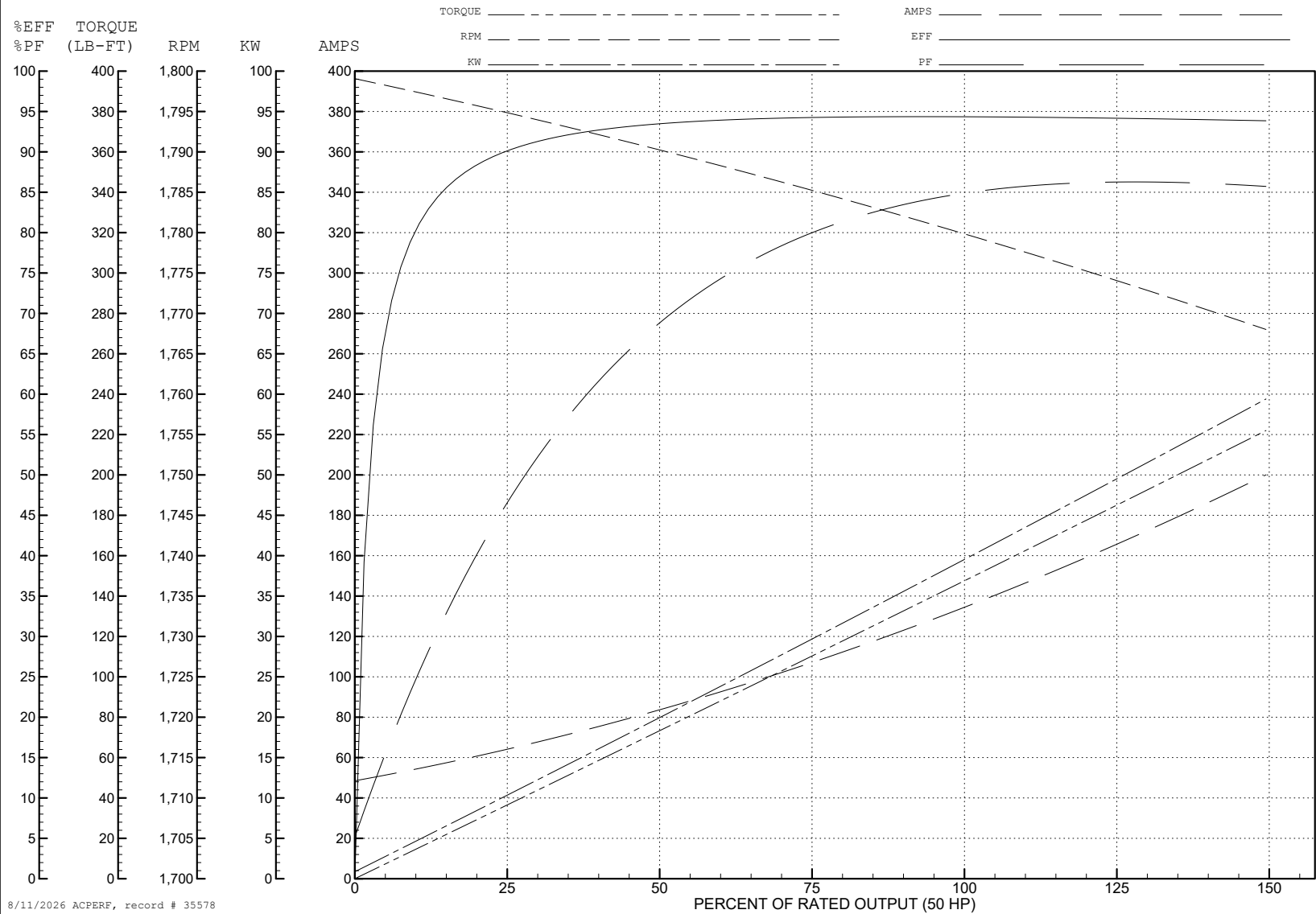
ABB Motors and Mechanical Inc.

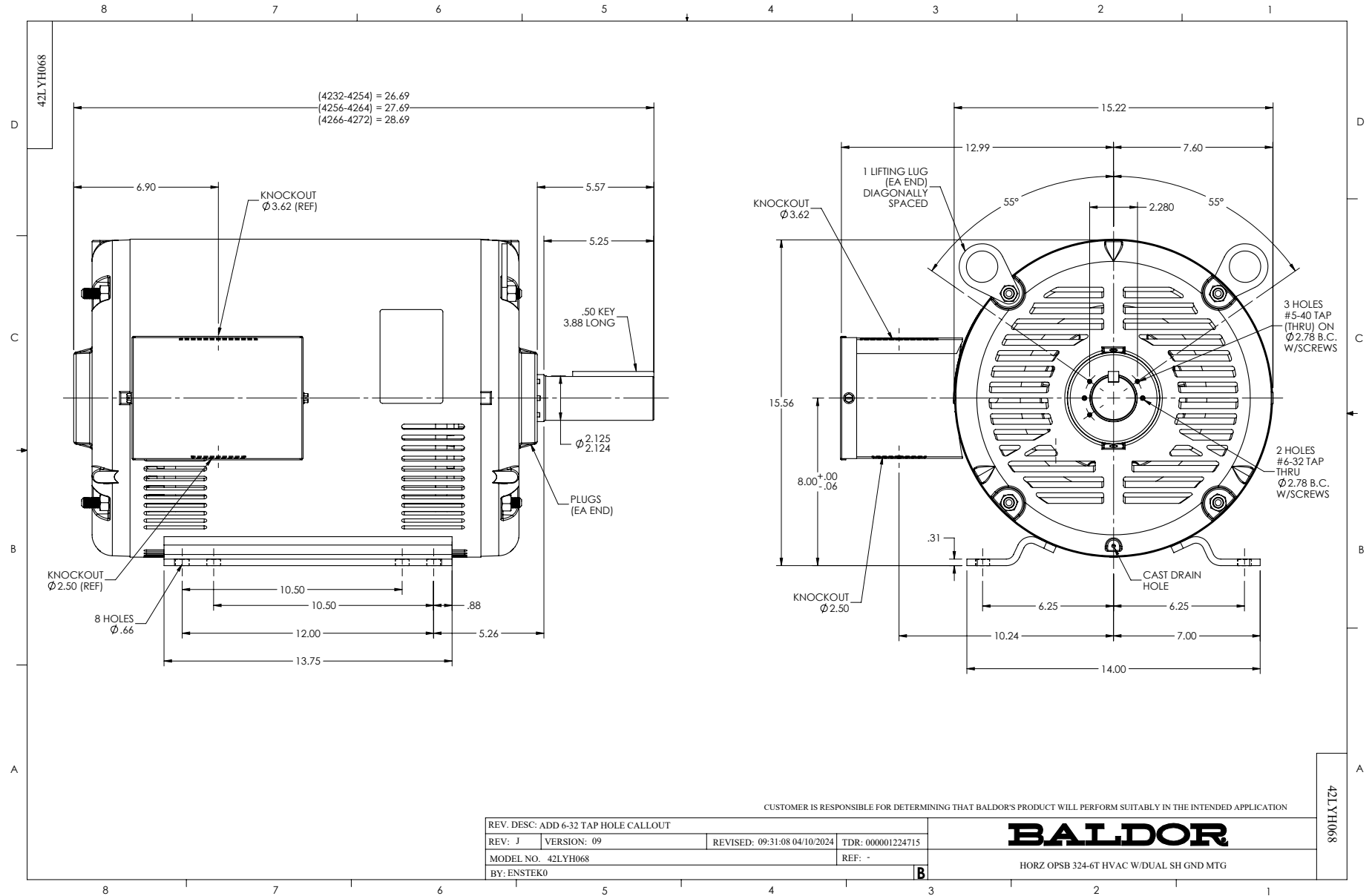
WINDING # 42WGW707

Typical performance - not guaranteed values.

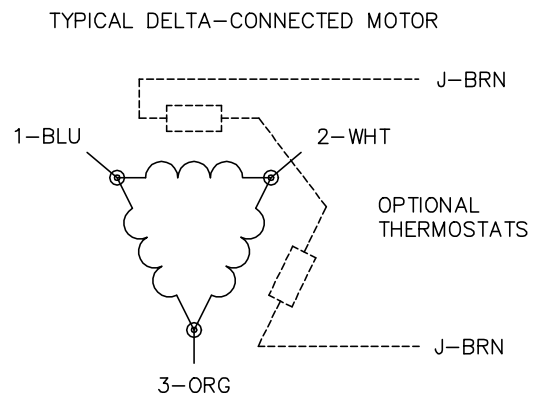
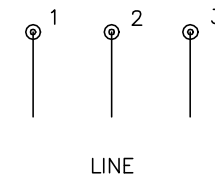
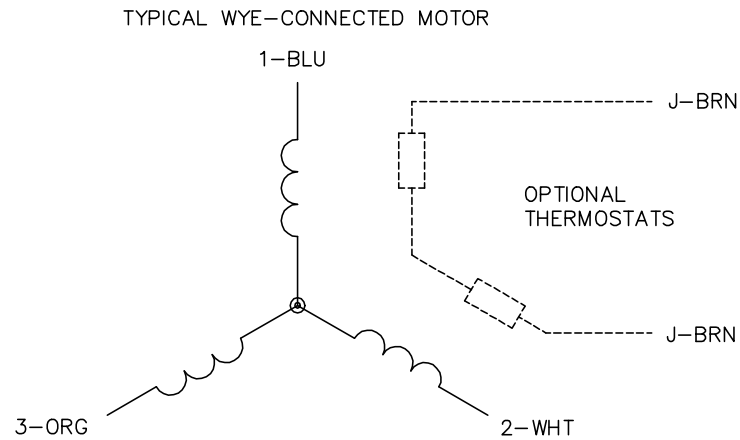
50 HP 3 PH 60 HZ 1775 RPM 200 V 4256M

TORQUES (LB-FT): PO=425 PU=225 LR=284 LRA=881





CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER 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 BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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