

ABB BALDOR RELIANCE III

Customer information packet

ECP84109T-4

40HP, 3545RPM, 3PH, 60HZ, 324TS, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	324TS
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM 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
Constant Torque Speed Range	1.2
Current @ Voltage	44.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY667
Layout	12LYF808
Eff. date	11-03-2025
CD Diagram	CD0006
Poles	02
Leads	3#8
Proprietary	False
Created date	12-11-2018

Heater Indicator	No Heater
High Voltage Full Load Amps	44.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP56
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1256M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	29.24 IN
Power Factor	91
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3545 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
NP4332

CAT.NO.	ECP84109T-4			P/N		ENCLOSURE			TEFC				
SPEC.	12-0000-0363			CC	010A	FRAME	324TS	S/N					
HP	40			CLASS	F	HZ	60	ODE BRG	6312	DE BRG	6312		
RPM	3545	RPM MAX	5400	PH	3	DES	B	D.E. BRG.	60BC03X30X				
VOLT	460			KVA-CODE	G		O.D.E. BRG.	60BC03X30X					
AMP	44			MOTOR WEIGHT			626	GREASE	POLYREX EM				
RATING	40C AMB-CONT			MAX. KVAR			4	BLANK					
NEMA-NOM-EFF	92.4	# OF ROTOR BARS			28	SER.F.	1.15	IP	56				
G.MIN.EFF	91	# OF STATOR SLOTS			36	PF	91	INV.TYPE	PWM				
TEMP CODE	T3	INVERTER-TEMP-CODE			200								
TEMP =	200	C HP FR	60	C HP TO	90								
CT HZ FROM	1.2	CT HZ TO	60										
HTR-VOLTS		HTR-AMPS		HTR-WATTS		MAX. SPACE HEATER TEMP.				VT HZ FROM	0-	VT HZ TO	60

AC Induction Motor Performance Data

Record # 47225

Typical performance - not guaranteed values

Winding: 12WGY667-R012			Type: 1256M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		40	Full Load Torque		59.1 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		44	Breakdown Torque		194 LB-FT		
R.P.M.		3545	Pull-up Torque		63.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		80.9 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		284 A
Service Factor (S.F.)		1.15	No-load Current		9.79 A		
NEMA Nom. Eff.		92.4	Power Factor	91	Line-line Res. @ 25°C		0.154 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		67°C	
S.F. Amps				Temp. Rise @ S.F. Load		83°C	
				Locked-rotor Power Factor		20.5	
				Rotor inertia		4.38 LB-FT2	

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	72	86	91	91	91	90	91
Efficiency	86.9	91.6	92.5	92.4	91.9	91	92.4
Speed	3588	3575	3561	3545	3529	3510	3526
Line amperes	15.1	23.7	33.6	44.3	56	68.5	51.2

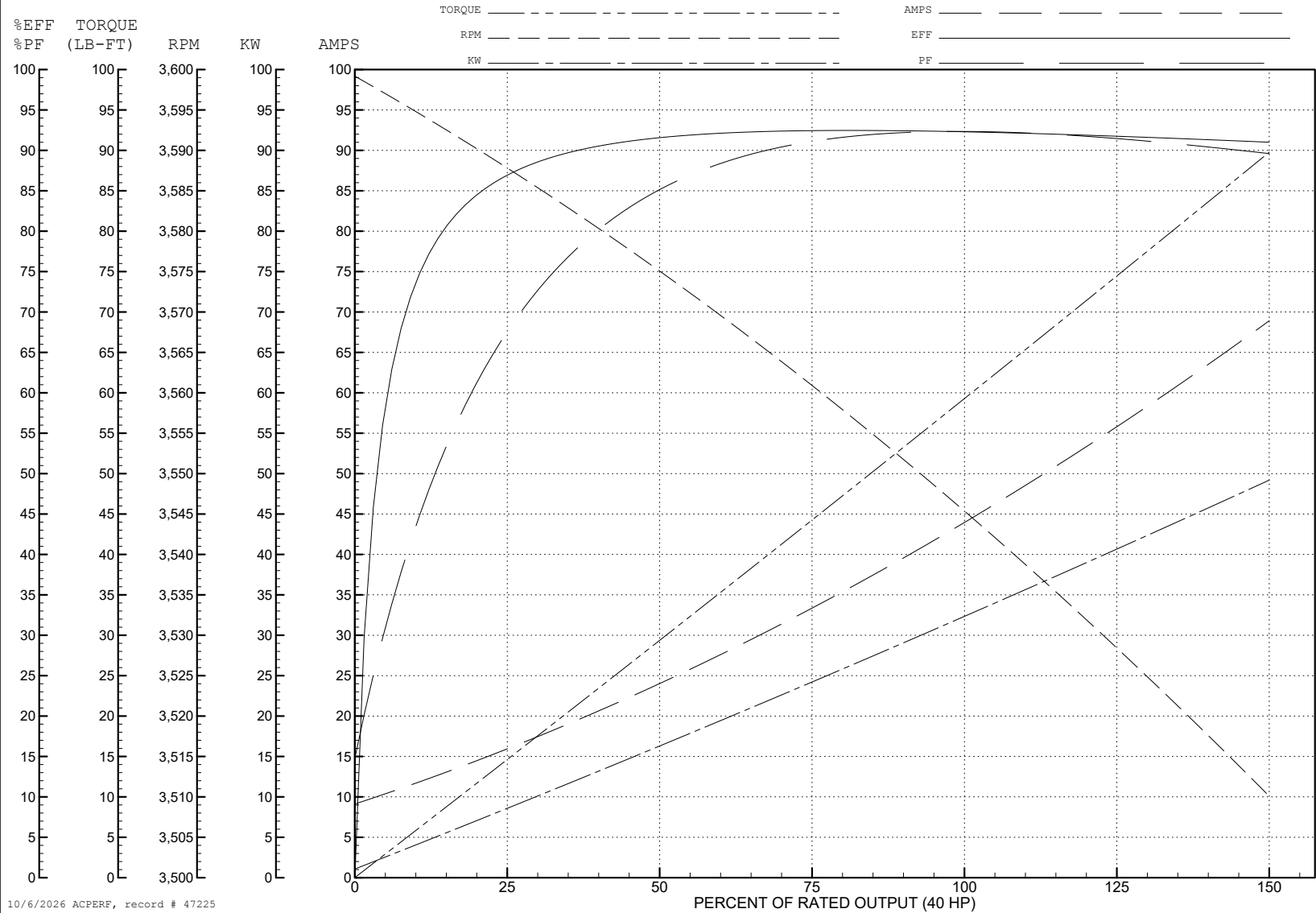
ABB Motors and Mechanical Inc.

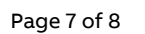
WINDING # 12WGY667

Typical performance - not guaranteed values.

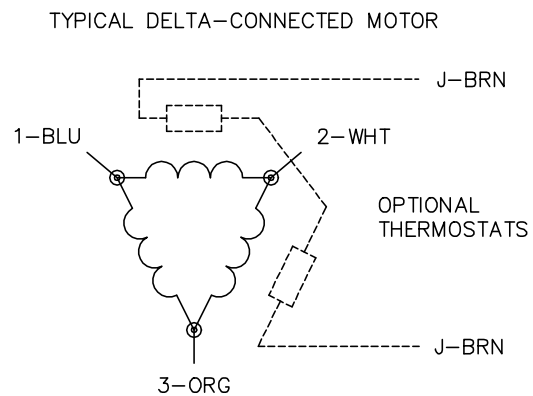
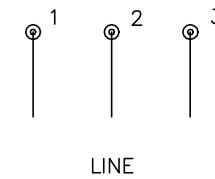
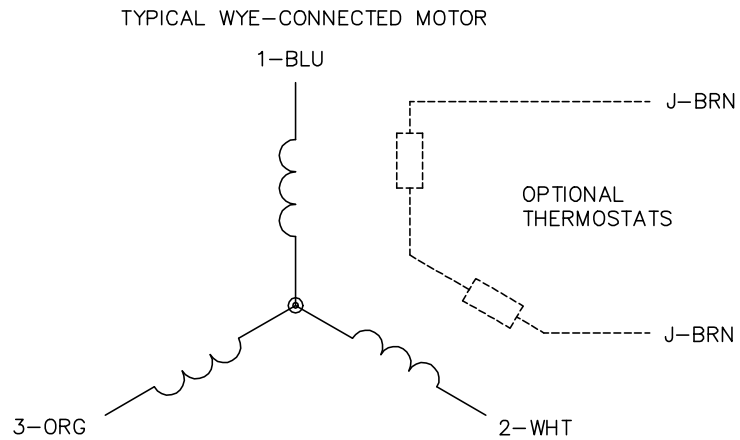
40 HP 3 PH 60 HZ 3545 RPM 460 V 1256M

TORQUES (LB-FT): PO=194 PU=63.8 LR=80.9 LRA=284





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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