

ABB BALDOR RELIANCE III

Customer information packet

ECP84110T-5

40HP, 1770RPM, 3PH, 60HZ, 324T, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	324T
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	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 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
Current @ Voltage	37.000 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3

Part Detail

Revision	K
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGZ151
Layout	12LYG135
Eff. date	11-03-2025
CD Diagram	CD0006
Poles	04
Leads	3#8
Proprietary	False
Created date	12-12-2018

Heater Indicator	No Heater
High Voltage Full Load Amps	37.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP56
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1260M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.74 IN
Power Factor	86
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 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.	ECP84110T-5			P/N		ENCLOSURE			TEFC		
SPEC.	12-0000-0371			CC	010A	FRAME	324T	S/N			
HP	40			CLASS	F	HZ	60	ODE BRG	6312	DE BRG	6312
RPM	1770	RPM MAX	2700	PH	3	DES	B	D.E. BRG.	60BC03X30X		
VOLT	575			KVA-CODE	F		O.D.E. BRG.	60BC03X30X			
AMP	37			MOTOR WEIGHT			635	GREASE	POLYREX EM		
RATING	40C AMB-CONT			MAX. KVAR			8.3	BLANK			
NEMA-NOM-EFF	94.1	# OF ROTOR BARS			40	SER.F.	1.15	IP	56		
G.MIN.EFF	93	# OF STATOR SLOTS			48	PF	86	INV.TYPE	PWM		
TEMP CODE	T3	INVERTER-TEMP-CODE			200						
TEMP =	200	C HP FR	60	C HP TO	90						
CT HZ FROM	1	CT HZ TO	60								
HTR-VOLTS		HTR-AMPS		HTR-WATTS				MAX. SPACE HEATER TEMP.			
									VT HZ FROM	O	VT HZ TO 60

AC Induction Motor Performance Data

Record # 93185

Typical performance - not guaranteed values

Winding: 12WGZ151-R002				Type: 1260M		Enclosure: TEFC	
Nameplate Data				575 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		40		Full Load Torque		119 LB-FT	
Volts		575		Start Configuration		direct on line	
Full Load Amps		37		Breakdown Torque		336 LB-FT	
R.P.M.		1770		Pull-up Torque		149 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		211 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		232 A
Service Factor (S.F.)		1.15		No-load Current		12.01 A	
NEMA Nom. Eff.		94.1	Power Factor	86	Line-line Res. @ 25°C		0.248 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
S.F. Amps				Temp. Rise @ S.F. Load		78°C	
				Locked-rotor Power Factor		26.4	
				Rotor inertia		7.99 lb-ft²	

Load Characteristics 575 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	55	76	83	86	87	86	87
Efficiency	92	94.6	94.8	94.1	93.5	92.7	94
Speed	1794	1787	1780	1773	1765	1756	1768
Line amperes	14.9	20.82	28.54	36.7	45.83	56.11	42.2

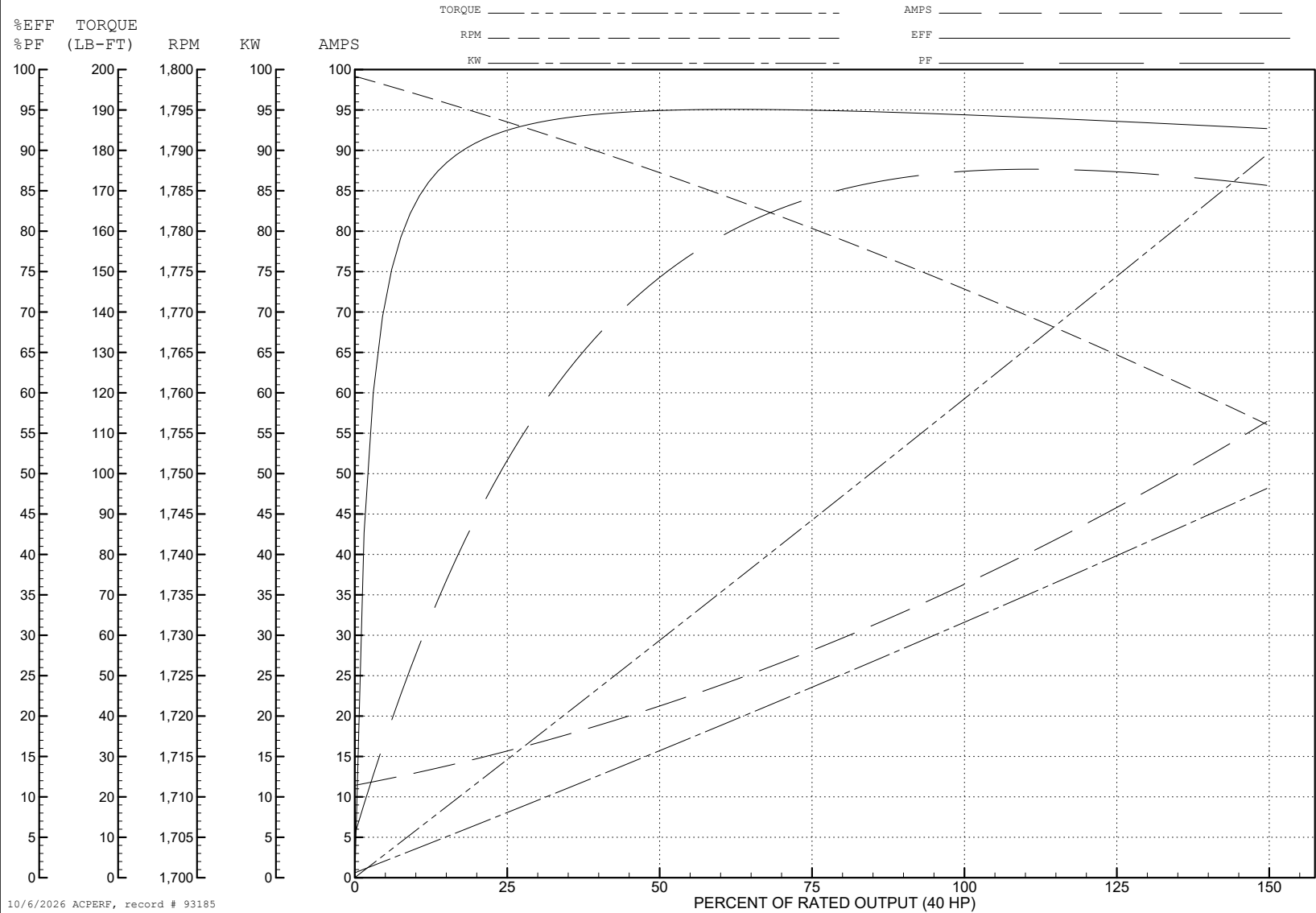
ABB Motors and Mechanical Inc.

WINDING # 12WGZ151

Typical performance - not guaranteed values.

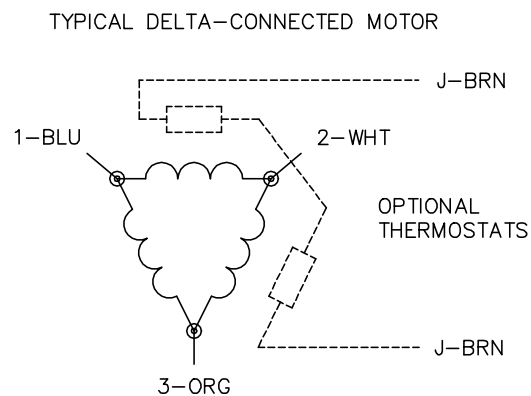
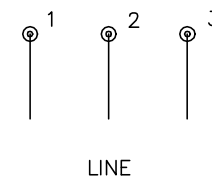
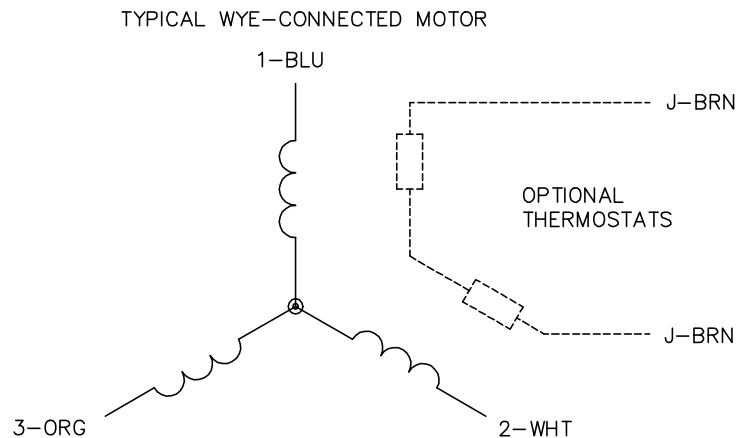
40 HP 3 PH 60 HZ 1770 RPM 575 V 1260M

TORQUES (LB-FT): PO=336 PU=149 LR=211 LRA=232





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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