

ABB BALDOR RELIANCE III

Customer information packet

ECP4109T-4

40HP, 3540RPM, 3PH, 60HZ, 324TS, 1244M, TEFC, F

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	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR CCSA US
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	6
Current @ Voltage	46.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	Q
Type	AC
Mech. spec.	12G154
Base	
Status	PRD/A
Elec. spec.	12WGY192
Layout	12LYG154
Eff. date	11-03-2025
CD Diagram	CD0006
Poles	02
Leads	3#8
Proprietary	False
Created date	01-27-2015

Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	46.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1244M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	29.15 IN
Power Factor	88
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3540 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

NP3241																
CAT.NO.	ECP4109T-4				P/N						ENCLOSURE		TEFC			
SPEC.	12G154Y192G2			CC	010A	FRAME		324TS		S/N						
HP	40				CLASS		F	HZ		60	DES	A				
RPM	3540				RPM MAX		5400		PH		3	KVA-CODE		H		
VOLT	460				MOTOR WEIGHT				635							
AMP	46				SER.F.		1.15		PF	88		ODE BRG		6312	DE BRG 6312	
RATING	40C AMB-CONT				NEMA-NOM-EFF				93		GREASE		POLYREX EM			
									INV.TYPE		PWM					
TEMP CODE	T3	INVERTER-TEMP-CODE				200										
TEMP =	200	C HP FR	60		C HP TO		90									
CT HZ FROM	6		CT HZ TO		60											
HTR-VOLTS			HTR-AMPS				HTR-WATTS				MAX. SPACE HEATER TEMP.					
													VT HZ FROM 3		VT HZ TO 60	

Accessories

Part number	Description	Multiplier
12-1105ECP	C FACE KIT (C-FACE SWAP FOR ECP MOTOR)	A8

AC Induction Motor Performance Data

Record # 47241

Typical performance - not guaranteed values

Winding: 12WGY192-R006			Type: 1244M		Enclosure: TEFC			
Nameplate Data			460 V, 60 Hz: Single Voltage Motor					
Rated Output (HP)		40	Full Load Torque		59.3 LB-FT			
Volts		460	Start Configuration		direct on line			
Full Load Amps		46	Breakdown Torque		235 LB-FT			
R.P.M.		3540	Pull-up Torque		84.3 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		100 LB-FT		
NEMA Design Code		A	KVA Code	H	Starting Current		352 A	
Service Factor (S.F.)		1.15	No-load Current		15.5 A			
NEMA Nom. Eff.		93	Power Factor		88	Line-line Res. @ 25°C		0.13313 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		67°C	
S.F. Amps					Temp. Rise @ S.F. Load		80°C	
					Rotor inertia		3.44 LB-FT2	

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	57	76	84	88	89	89	89
Efficiency	88	92.2	93.2	93.3	93	92.4	93.1
Speed	3585.6	3575.4	3564.2	3553.6	3540.6	3527.7	3546
Line amperes	19.4	27.1	36.3	46.3	57.3	68.5	52.9

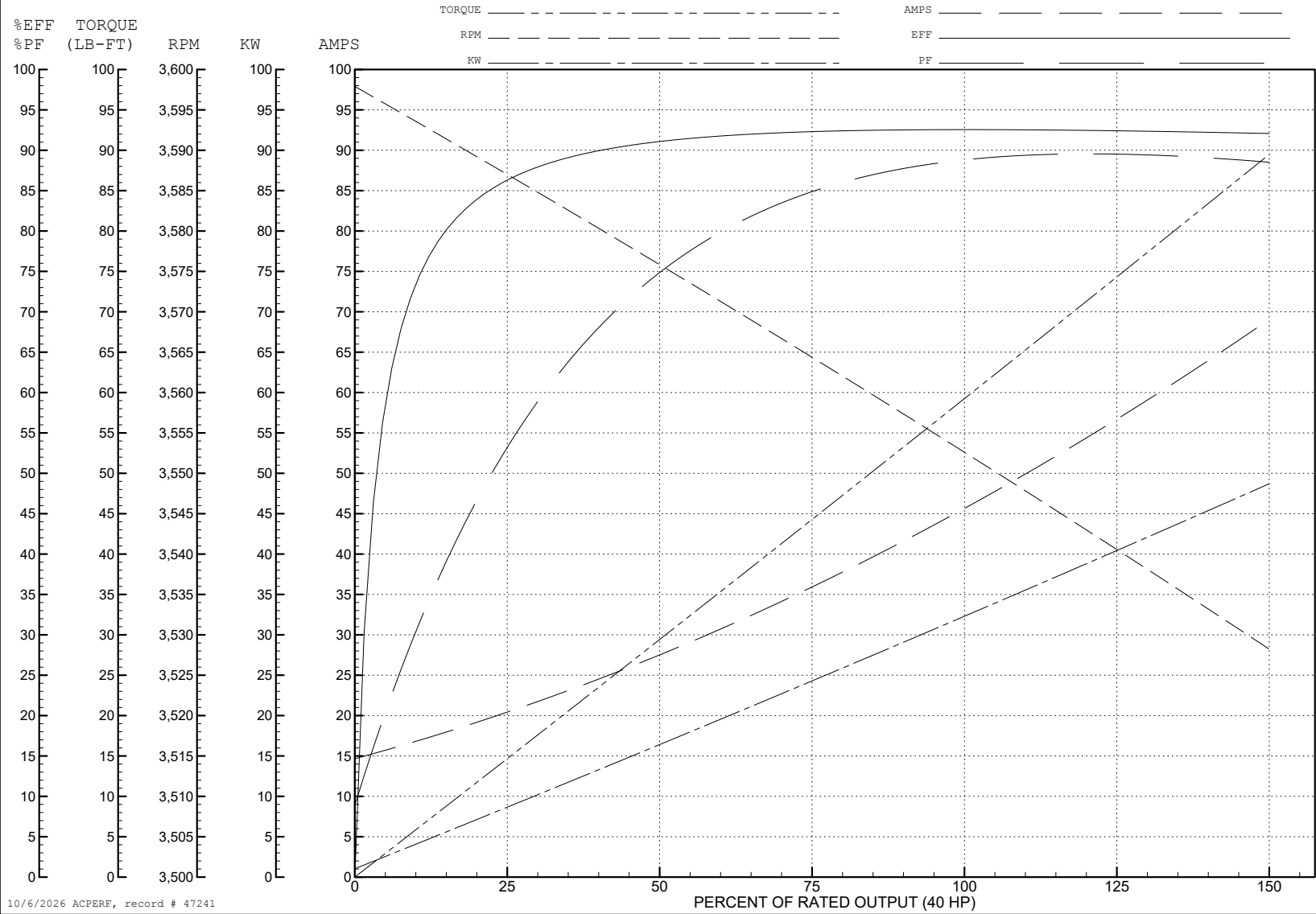
ABB Motors and Mechanical Inc.

WINDING # 12WGY192

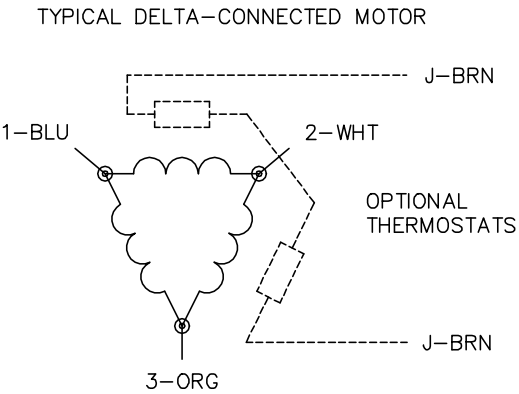
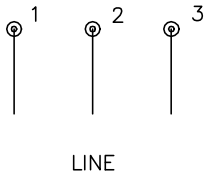
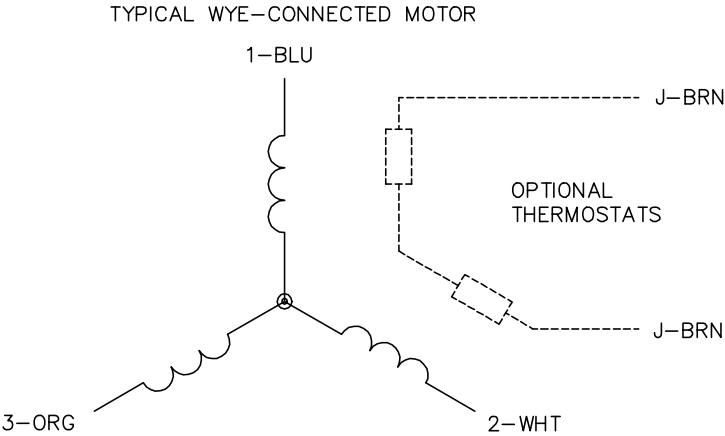
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 3540 RPM 460 V 1244M

TORQUES (LB-FT): PO=235 PU=84.3 LR=100 LRA=352



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

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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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