

ABB BALDOR RELIANCE III

Customer information packet

ECP4100T

15HP, 1175RPM, 3PH, 60HZ, 284T, 1046M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	284T
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	15.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 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	1.3
Current @ Voltage	42.000 A @ 230.0 V 42.000 A @ 208.0 V 21.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated

Part Detail

Revision	M
Type	AC
Mech. spec.	10H292
Base	
Status	PRD/A
Elec. spec.	10WGY561
Layout	10LYH292
Eff. date	09-29-2025
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	12-13-2017

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	21.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1046M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	28.00 IN
Power Factor	73
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	1175 rpm
Speed Code	Single Speed

Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3241																	
CAT.NO.	ECP4100T			P/N						ENCLOSURE		TEFC					
SPEC.	10H292Y561G1		CC	010A	FRAME	284T		S/N									
HP	15			CLASS		F	HZ	60	DES	A							
RPM	1175			RPM MAX		1800		PH	3	KVA-CODE		H					
VOLT	230/460			MOTOR WEIGHT				449									
AMP	42/21			SER.F.		1.15	PF	73	ODE BRG		6311	DE BRG		6311			
RATING	40C AMB-CONT			NEMA-NOM-EFF				91.7		GREASE		POLYREX EM					
							INV.TYPE		PWM								
TEMP CODE	T3C	INVERTER-TEMP-CODE			180												
TEMP =	160	C HP FR	60	C HP TO		90											
CT HZ FROM	1.3	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 # 29743

Typical performance - not guaranteed values

Winding: 10WGY561-R001			Type: 1046M		Enclosure: TEFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		15		Full Load Torque		66.68 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		42/21		Breakdown Torque		213 LB-FT		
R.P.M.		1175		Pull-up Torque		93.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		114 LB-FT		
NEMA Design Code		A	KVA Code	H	Starting Current		144 A	
Service Factor (S.F.)		1.15		No-load Current		12.4 A		
NEMA Nom. Eff.		91.7	Power Factor	73	Line-line Res. @ 25°C		0.502 Ω	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		43°C
S.F. Amps						Temp. Rise @ S.F. Load		51°C
						Locked-rotor Power Factor		32.9
						Rotor inertia		5.63 LB-FT2

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	52	65	72	76	78	75
Efficiency	83	89.4	91.3	91.7	91.4	90.8	91.7
Speed	1196	1193	1189	1185	1181	1177	1181
Line amperes	13.2	15.1	17.9	21.3	25.3	29.6	23.4

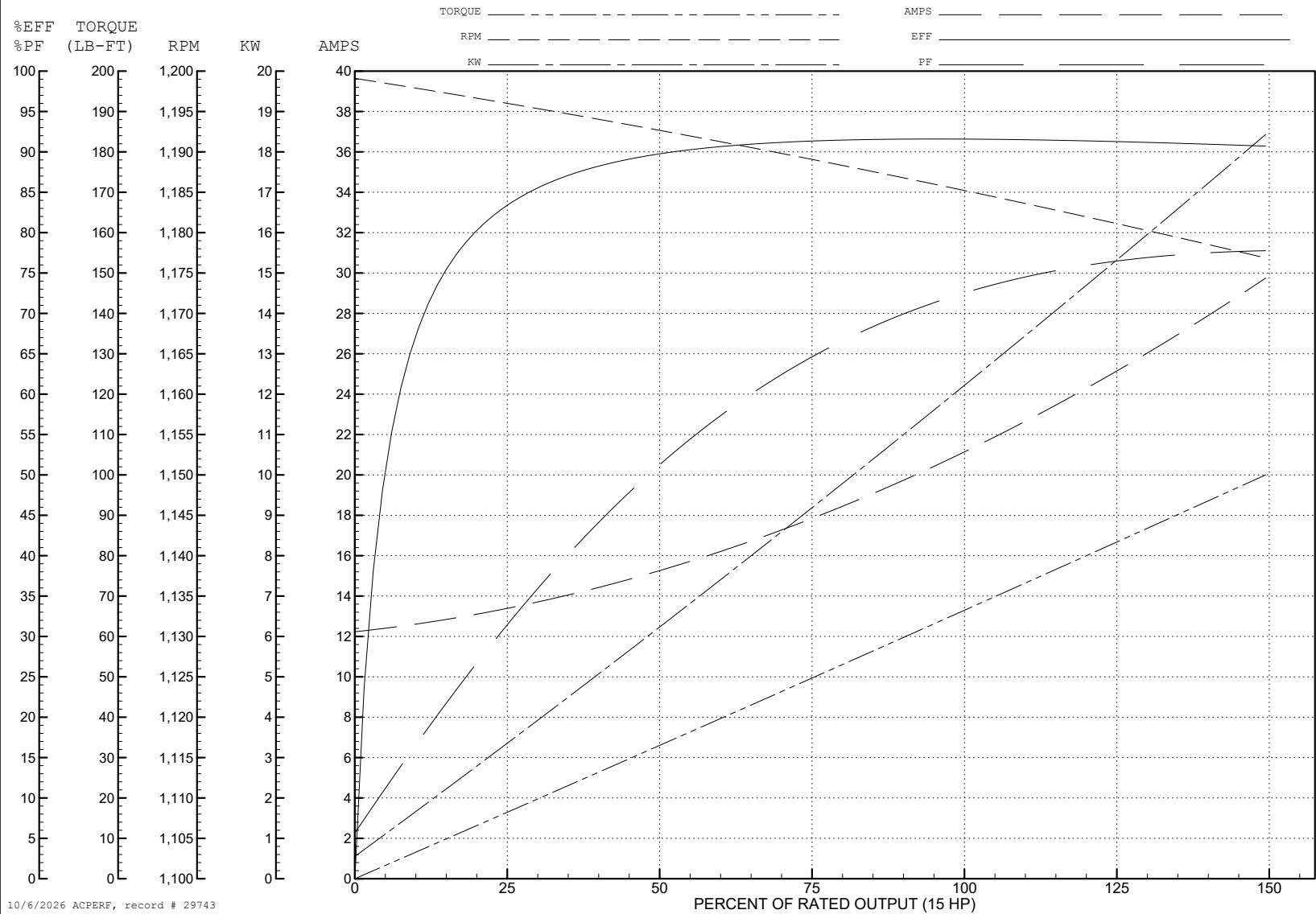
ABB Motors and Mechanical Inc.

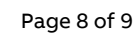
WINDING # 10WGY561

Typical performance - not guaranteed values.

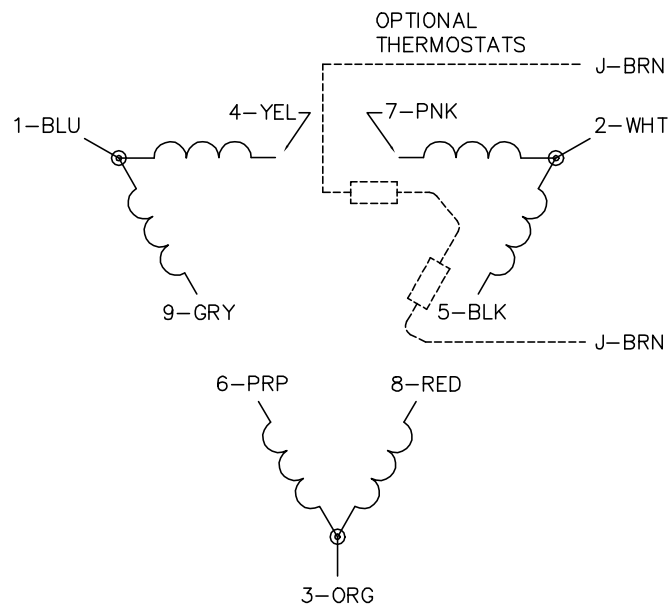
15 HP 3 PH 60 HZ 1175 RPM 460 V 1046M

TORQUES (LB-FT): PO=213 PU=93.1 LR=114 LRA=144

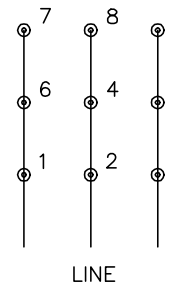




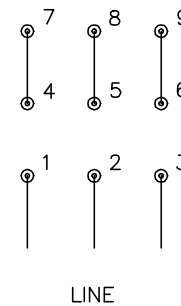
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —



BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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