

ABB BALDOR RELIANCE III

Customer information packet

CEM4108T

30HP, 3525RPM, 3PH, 60HZ, 286TSC, 1048M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286TSC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM (OLD LOGO) CURUSEEV NEMA PREMIUM
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	68.000 A @ 230.0 V 34.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	J
Type	AC
Mech. spec.	10E346
Base	
Status	PRD/A
Elec. spec.	10WGZ501
Layout	10LYE346
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	08-31-2017

High Voltage Full Load Amps	34.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1048M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	26.39 IN
Power Factor	90
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3525 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

NP3443LUA											
CAT.NO.	CEM4108T			CUST. P/N				ENCL			TEFC
SPEC.	10E346Z501G1	CC	010A	FRAME	286TSC	SER.NO.					
HP	30		CLASS	F	HZ	60					
R.P.M.	3525		PH.	3	DES.	B					
VOLTS	230/460		CODE		G	ODE BRG		6309	DE BRG	6311	
AMPS	68/34										
RATING	40C AMB-CONT		NEMA NOM. EFF.			91.7		GREASE		POLYREX EM	
P.F.	90	SER.F.	1.15	CT6-60H(10:1)VT3-60H(20:1							
USABLE AT	50Hz 30HP 190/380V 82/41A			SF1.0							
VOLTS	AMPS	MAX. SPACE HEATER TEMP.									

AC Induction Motor Performance Data

Record # 55452

Typical performance - not guaranteed values

Winding: 10WGZ501-R001			Type: 1048M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		30		Full Load Torque		44.8 LB-FT
Volts		230/460		Start Configuration		direct on line
Full Load Amps		68/34		Breakdown Torque		135 LB-FT
R.P.M.		3520		Pull-up Torque		47 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		65.2 LB-FT
NEMA Design Code		B	KVA Code	G	Starting Current	
Service Factor (S.F.)		1.15		No-load Current		8.74 A
NEMA Nom. Eff.		91.7	Power Factor	90	Line-line Res. @ 25°C	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load
S.F. Amps						Temp. Rise @ S.F. Load
						Locked-rotor Power Factor

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	67	83	88	90	90	90	90
Efficiency	87	91.3	92	91.7	90.9	89.7	91.2
Speed	3583	3565.7	3547.3	3526.7	3504.4	3479.1	3513
Line amperes	12.4	18.7	26.1	34.1	43.1	52.5	39.5

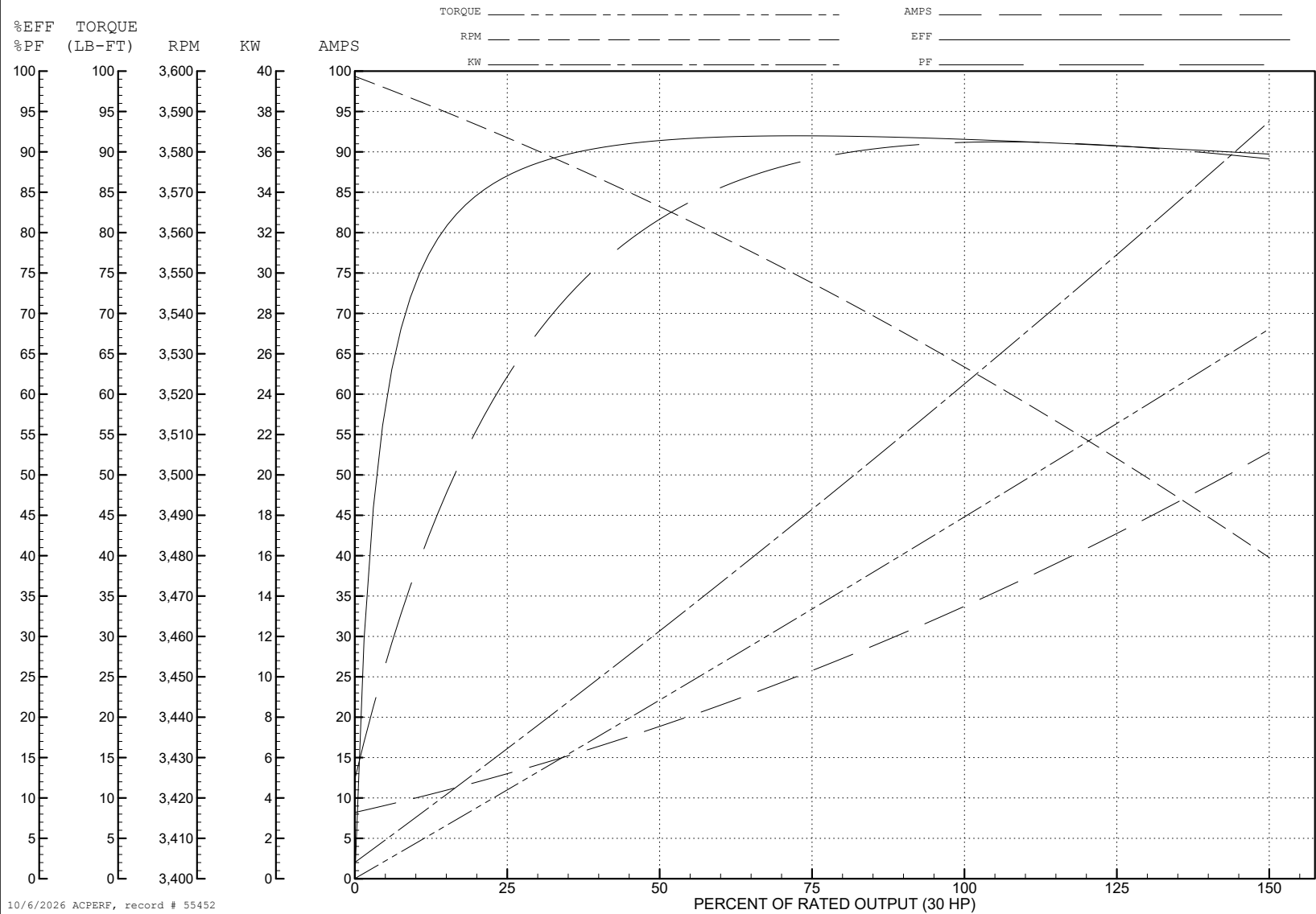
ABB Motors and Mechanical Inc.

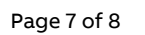
WINDING # 10WGZ501

Typical performance - not guaranteed values.

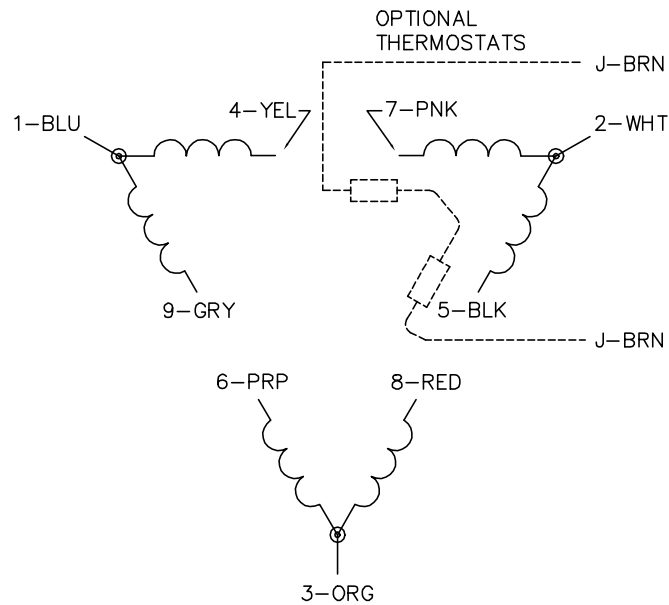
30 HP 3 PH 60 HZ 3520 RPM 460 V 1048M

TORQUES (LB-FT): PO=135 PU=47 LR=65.2 LRA=212

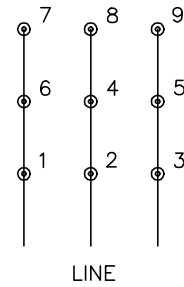




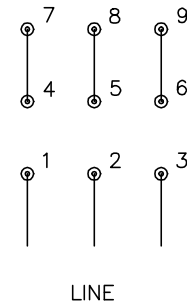
CD0180



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

SH 1 of 1