

ABB BALDOR RELIANCE III

Customer information packet

CEM4110T-G

40HP, 1775RPM, 3PH, 60HZ, 324TC, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	324TC
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	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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
Current @ Voltage	96.000 A @ 230.0 V 48.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	48.0 a

Part Detail

Revision	K
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY276
Layout	12LYH471
Eff. date	05-07-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	12-16-2019

Insulation Class	H
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1254M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	82
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1775 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.	CEM4110T-G				CUST. P/N				ENCL			TEFC
SPEC.	12-0000582	CC	010A	FRAME	324TC	SER.NO.						
HP	40		CLASS	H	HZ	60						
R.P.M.	1775		PH.	3	DES.	A						
VOLTS	230/460		CODE		H	ODE BRG		6311	DE BRG	6312		
AMPS	96/48											
RATING	40C AMB-CONT		NEMA NOM. EFF.			94.1		GREASE		POLYREX EM		
P.F.	82	SER.F.	1.15		CT6-60H(10:1)VT3-60H(20:1							
USABLE AT	50HZ 40HP 190/380V 114/57A				SF1.0							
VOLTS	AMPS	MAX. SPACE HEATER TEMP.										

AC Induction Motor Performance Data

Record # 48204

Typical performance - not guaranteed values

Winding: 12WGY276-R010			Type: 1254M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		40		Full Load Torque		118 LB-FT
Volts		230/460		Start Configuration		direct on line
Full Load Amps		96/48		Breakdown Torque		386 LB-FT
R.P.M.		1775		Pull-up Torque		193 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		216 LB-FT
NEMA Design Code		A	KVA Code	Starting Current		338 A
Service Factor (S.F.)		1.15		No-load Current		19.9 A
NEMA Nom. Eff.		94.1	Power Factor	Line-line Res. @ 25°C		0.14898 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		54°C
S.F. Amps				Temp. Rise @ S.F. Load		64°C
				Locked-rotor Power Factor		27
				Rotor inertia		7.19 LB-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	69	78	83	85	85	84
Efficiency	90.1	93.5	94.2	94.2	93.8	93.1	94
Speed	1793.5	1788	1782.5	1776.6	1770.7	1764.1	1773
Line amperes	22.9	29.5	38.4	48.1	59.2	70.8	54.8

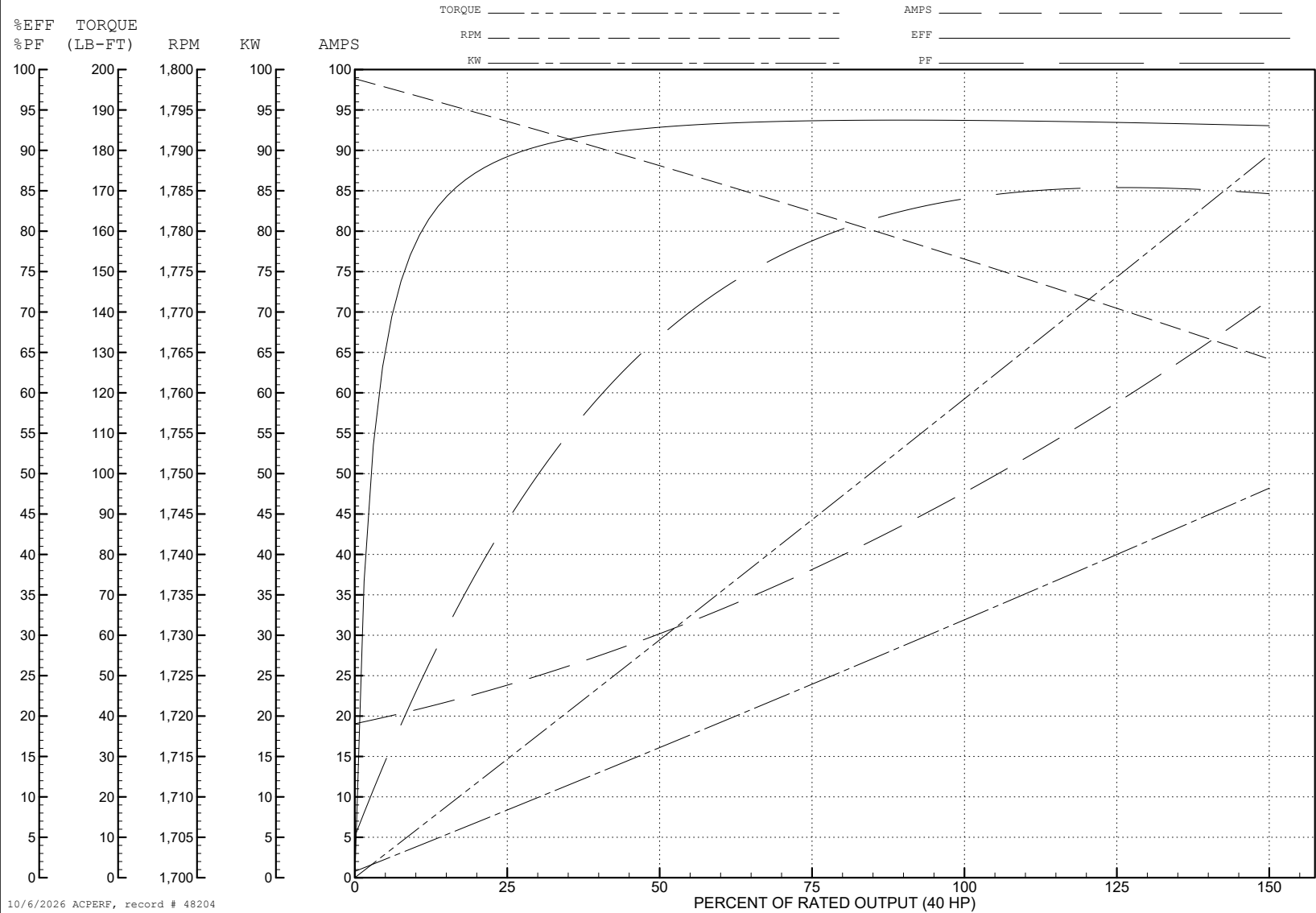
ABB Motors and Mechanical Inc.

WINDING # 12WGY276

Typical performance - not guaranteed values.

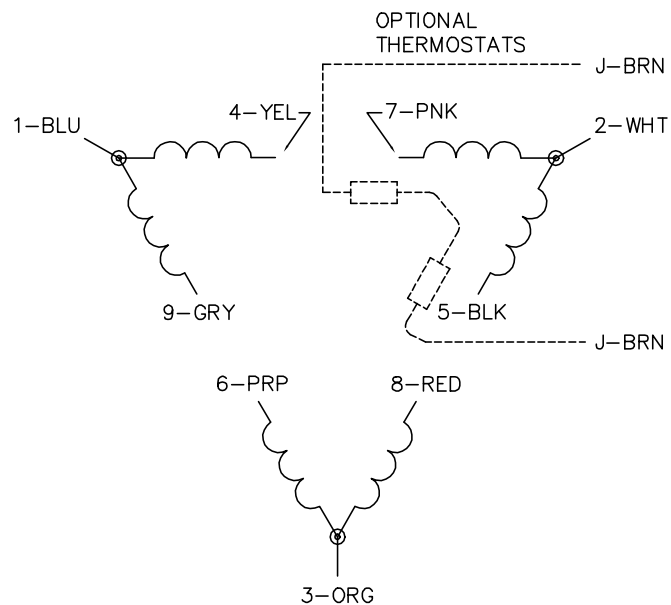
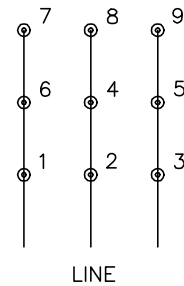
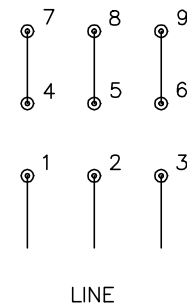
40 HP 3 PH 60 HZ 1775 RPM 460 V 1254M

TORQUES (LB-FT): PO=386 PU=193 LR=216 LRA=338





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.

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

CD0180