

ABB BALDOR RELIANCE III

Customer information packet

CTM4110T

40 AIR OVERHP, 1775RPM, 3PH, 60HZ, 324T, 1248

Class - None

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	324T
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 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	94.000 A @ 230.0 V 47.000 A @ 460.0 V 101.000 A @ 208.0 V
Design Code	B
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
Heater Indicator	No Heater

Part Detail

Revision	K
Type	AC
Mech. spec.	12H727
Base	
Status	PRD/A
Elec. spec.	12WGX276
Layout	12LYH727
Eff. date	10-16-2025
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	08-17-2015

High Voltage Full Load Amps	47.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	G
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1248M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.38 IN
Power Factor	85
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1258									
CAT.NO.	CTM4110T								
SPEC.	12H727X276H2								
HP	40 AIR OVER								
VOLTS	230/460								
AMP	94/47								
RPM	1775								
FRAME	324T		HZ	60		PH		3	
SER.F.	1.15		CODE	G		DES	B		CL F
NEMA-NOM-EFF	93		PF	85					
RATING	40C AMB-CONT								
CC									
DE	6312		ODE	6311					
ENCL	TEAO		SN						
	2050 FPM @ 520CFM								

AC Induction Motor Performance Data

Record # 52135

Typical performance - not guaranteed values

Winding: 12WGX276-R006			Type: 1248M		Enclosure: TEAO		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		40 AIR OVER	Full Load Torque		119 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		94/47	Breakdown Torque		337 LB-FT		
R.P.M.		1775	Pull-up Torque		139 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque		171 LB-FT		
NEMA Design Code		B	KVA Code		G	Starting Current	300 A
Service Factor (S.F.)		1.15	No-load Current		17.3 A		
NEMA Nom. Eff.		93	Power Factor		85	Line-line Res. @ 25°C	0.158 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		58°C		
S.F. Amps			Temp. Rise @ S.F. Load		77°C		
			Locked-rotor Power Factor		27		
			Rotor inertia		6.39 LB-FT2		

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	73	82	85	87	86	86
Efficiency	88.1	92.4	93.2	93	92.4	91.5	92.6
Speed	1794	1788	1782	1775	1768	1759	1771
Line amperes	20.5	27.7	36.9	47.4	58.6	71.1	54.1

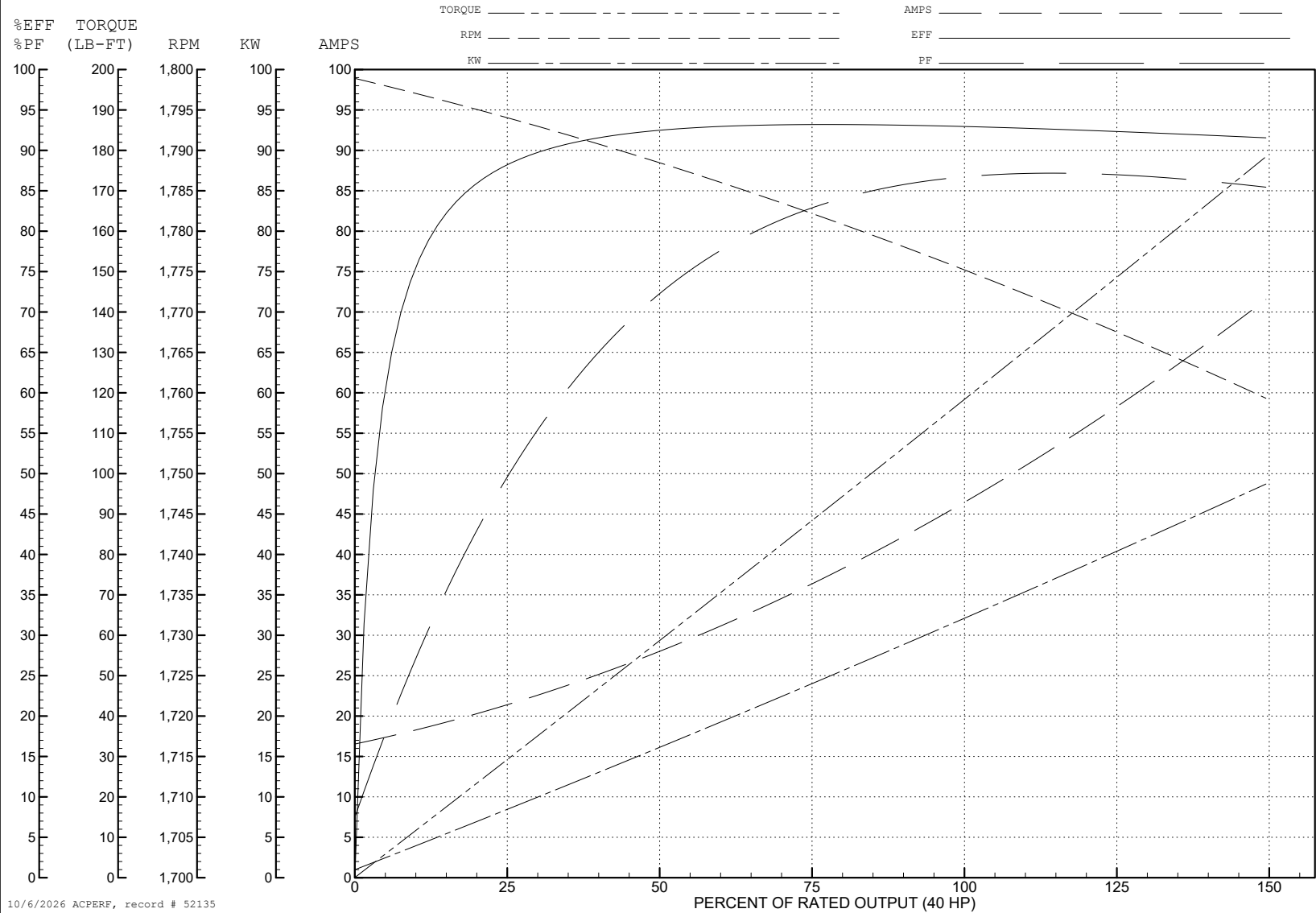
ABB Motors and Mechanical Inc.

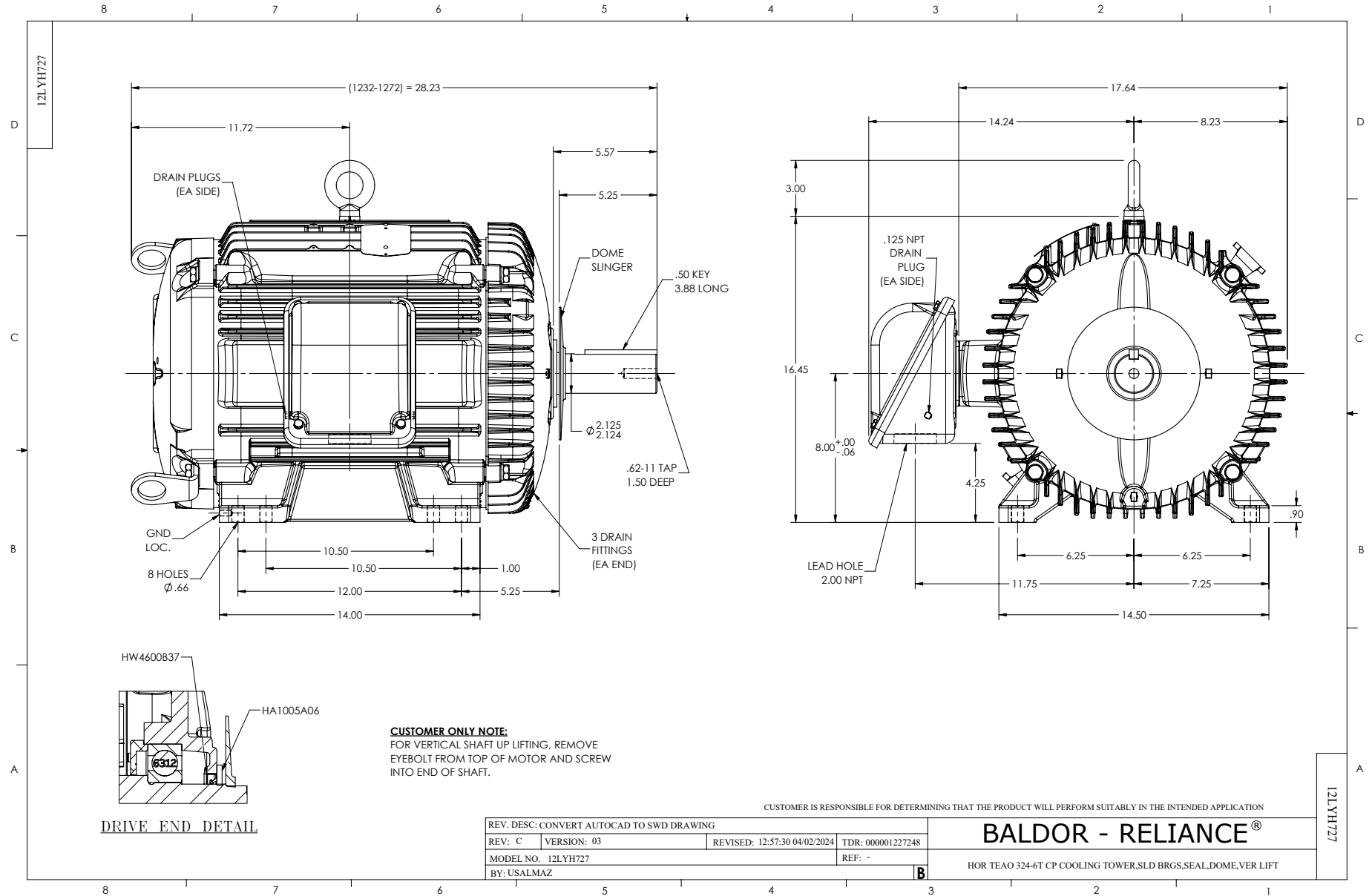
WINDING # 12WGX276

Typical performance - not guaranteed values.

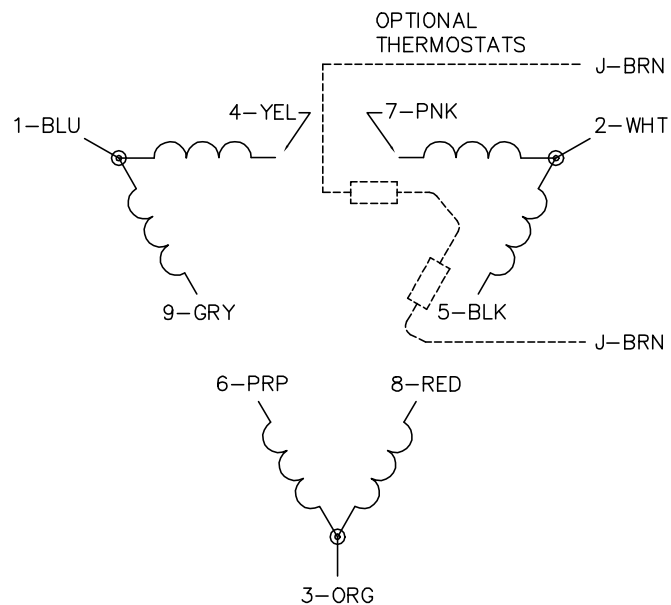
40 HP 3 PH 60 HZ 1775 RPM 460 V 1248M

TORQUES (LB-FT): PO=337 PU=139 LR=171 LRA=300

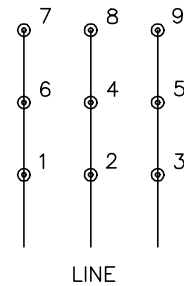




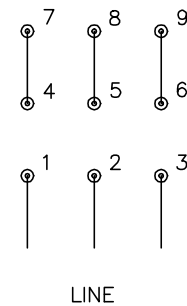
CD0180



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