

ABB BALDOR RELIANCE III

Customer information packet

FSWDM41904T

30HP, 1775RPM, 3PH, 60HZ, 284T, 4074M, TEFC, F1

Specifications

Enclosure	TEFC
Frame	284T
Frame Material	Stainless Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA 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	37.000 A @ 460.0 V 74.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	37.0 a
Insulation Class	H

Part Detail

Revision	N
Type	AC
Mech. spec.	40E430
Base	
Status	PRD/A
Elec. spec.	40WGX291
Layout	40LYE430
Eff. date	06-13-2024
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	06-14-2017

Inverter Code	Inverter Ready
KVA Code	H
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	4074M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.14 IN
Power Factor	82
Product Family	WD All SD Non-Encapsulated
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	Included
RoHS Status	ROHS 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	No Slinger
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

NP4427AAA05													
CAT #	FSWDM41904T					WGT	395	LBS					
SPEC	40E430X291G1					ENCL	TEFC						
SER #						CC	010A	IP	69				
HP	30				MAG CUR	31.8/15.9							
VOLTS	230/460								NEMA NOM. EFF	93.6			
AMPS	74/37							PF	82				
RATING	40C AMB-CONT												
RPM	1775					MAX RPM			2700				
FRAME	284T	HZ		60			CODE	H	CLASS		H		
SER.F.	1.15	SF AMP						PH	3	DES	A		
DE	6311			ODE		6311							
LUBRICATION	POLYREX EM												
ID LOGO	INV TYPE:		VPWM		CHP		60	TO		90	1.5:1		
ID LOGO	WK2	5.89	CT		20	TO		60	3:1				
ID LOGO	SL HZ	0.8	VT		6	TO		60	10:1				

AC Induction Motor Performance Data

Record # 68511

Typical performance - not guaranteed values

Winding: 40WGX291-R001			Type: 4074M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		30	Full Load Torque		88.96 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		74/37	Breakdown Torque		336 LB-FT		
R.P.M.		1775	Pull-up Torque		132 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		173 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		267 A
Service Factor (S.F.)		1.15	No-load Current		15.9 A		
NEMA Nom. Eff.		93.6	Power Factor	82	Line-line Res. @ 25°C		0.18115 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		73°C
S.F. Amps					Temp. Rise @ S.F. Load		85°C
					Locked-rotor Power Factor		29.8
					Rotor inertia		5.89 lb-ft²

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	66	77	82	84	85	83
Efficiency	88.3	92.6	93.7	93.8	93.6	93	93.7
Speed	1793.4	1787.8	1782.2	1776.1	1769.6	1761.9	1772
Line amperes	18.2	23	29.4	36.7	44.5	53.2	41.4

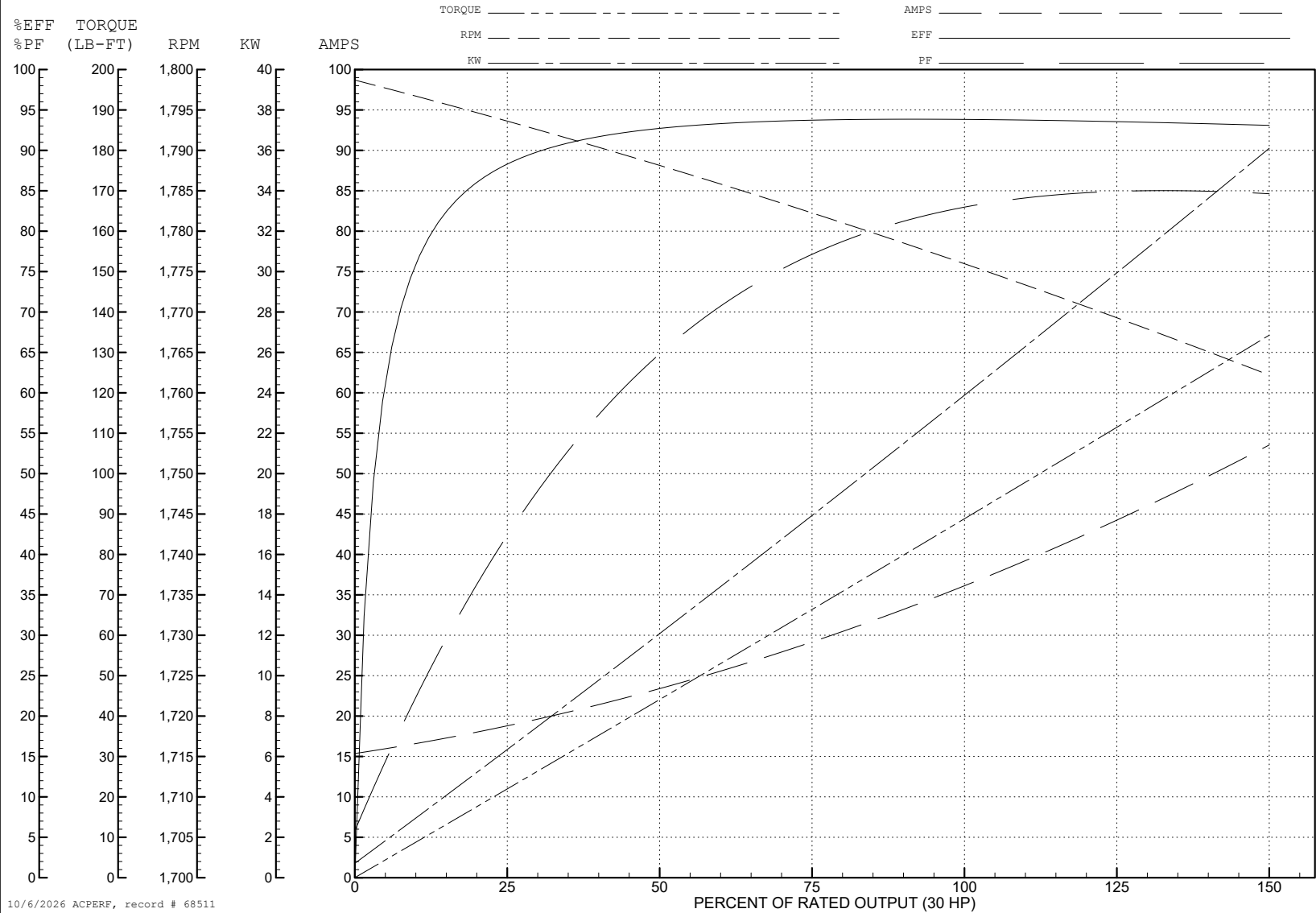
ABB Motors and Mechanical Inc.

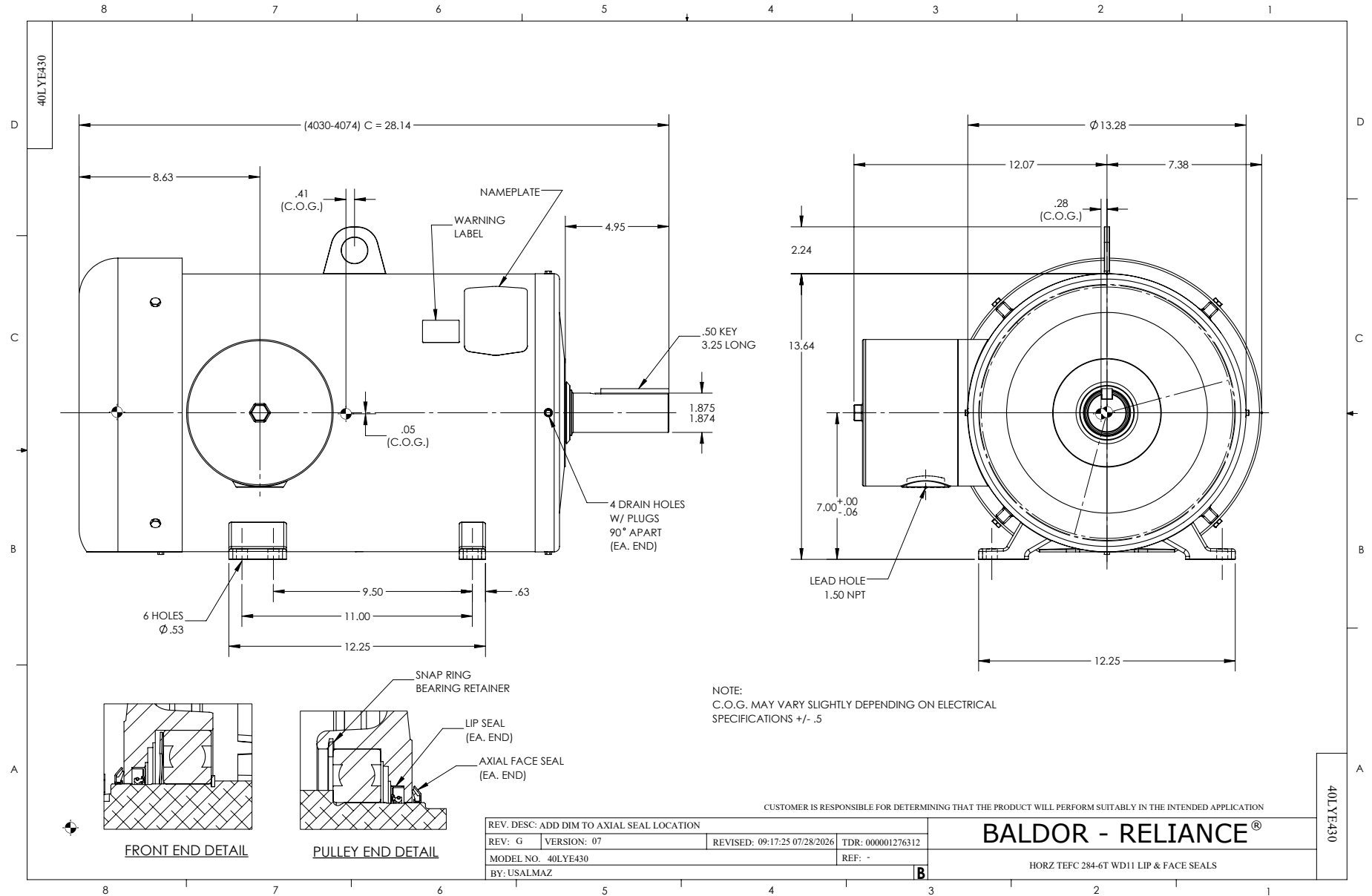
WINDING # 40WGX291

Typical performance - not guaranteed values.

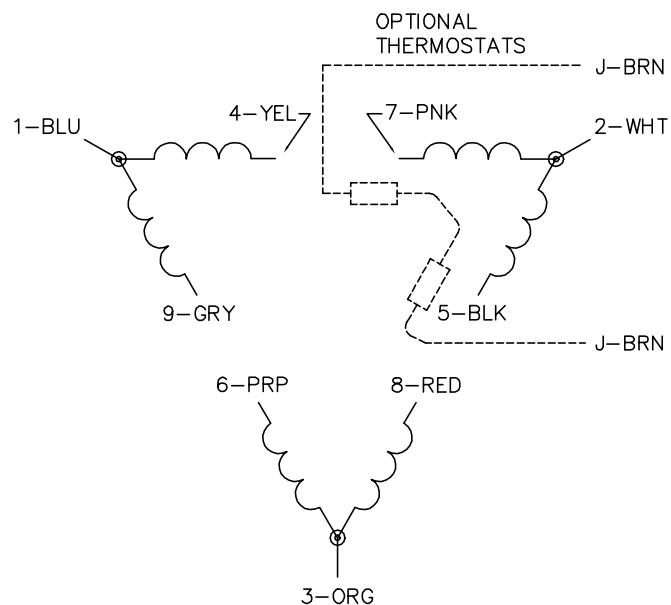
30 HP 3 PH 60 HZ 1775 RPM 460 V 4074M

TORQUES (LB-FT): PO=336 PU=132 LR=173 LRA=267

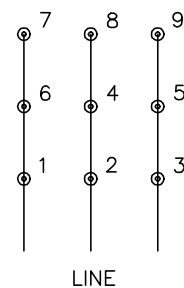




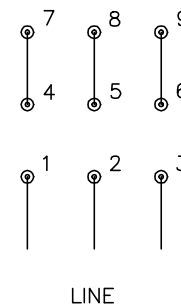
CD0180



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