

BALDOR • RELIANCE

Customer information packet

40H003X420G1

30HP, 1800RPM, 3PH, 60HZ, 286TZ, 4046M, OPSB, F

Specifications

Enclosure	OPSB
Frame	286TZ
Frame Material	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	240.0 V @ 60 HZ
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	74.000 A @ 240.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	74.0 a
Insulation Class	F
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	-
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	5 @ 6 AWG
Motor Lead Termination	Flying Leads

Part detail

Revision	N
Type	AC
Mech. spec.	40H03
Base	
Status	PRD/A
Elec. spec.	40WGX420
Layout	40LYH003
Eff. date	07-24-2023
CD Diagram	CD2171
Poles	04
Leads	5#6 6" LONG IN BOX,1#6 H TAP 6" LONG IN BOX,1#6 M TAP 6" LY
Proprietary	False
Created date	08-17-2018

Motor Standards	NEMA
Motor Type	4046M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.75 IN
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	None
Rodent Screen	None
Service Factor	1.15
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1800 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3878L						
SPEC	40H003X420G1					
1PH INPUT VOLTS	240					
1PH INPUT AMPS	75					
3PH OUTPUT VOLTS	240					
3PH OUTPUT AMPS	75					
3PH MAX OUTPUT KVA	31					
HZ	60	CLASS	F	ENCL	OPSB	
RATING	40C AMB-CONT					
FRAME	286TZ					
DE	6309	ODE	6309			
SER						
NAMEPLATE #	1	OF	1			

AC Induction Motor Performance Data

Record # 72648

Typical performance - not guaranteed values

Winding: 40WGX420-R001		Type: 4046M		Enclosure: OPSB	
Nameplate Data			240 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	30	Full Load Torque	94.49 LB-FT		
Volts	240	Start Configuration	direct on line		
Full Load Amps	74	Breakdown Torque	316 LB-FT		
R.P.M.	1800	Pull-up Torque	350 LB-FT		
Hz	60	Locked-rotor Torque	355 LB-FT		
NEMA Design Code	-	Starting Current	379 A		
Service Factor (S.F.)	1.15	No-load Current	33.82 A		
NEMA Nom. Eff.	0	Line-line Res. @ 25°C	0.0795 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	66°C		
S.F. Amps		Temp. Rise @ S.F. Load	85°C		
		Locked-rotor Power Factor	54.9		
		Rotor inertia	3.57 LB-FT ²		

Load Characteristics 240 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	66	78	83	87	87	85
Efficiency	88.1	91.5	87.4	83.6	80.8	78.3	81.9
Speed	1756	1763	1666	1592	1558	1508	1572
Line amperes	37.85	47.37	59.16	73.66	89.01	106	82.9

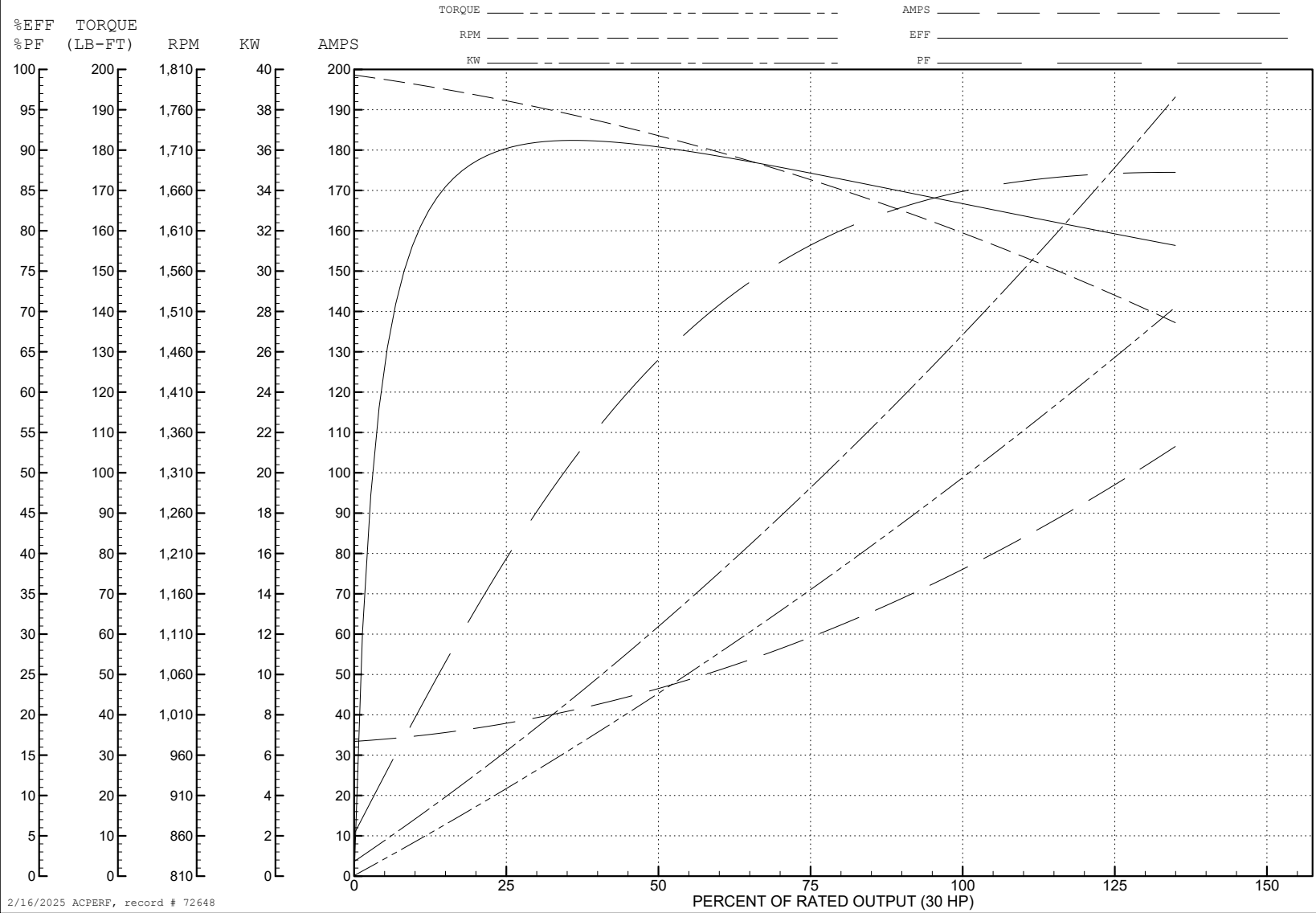
ABB Motors and Mechanical Inc.

WINDING # 40WG420

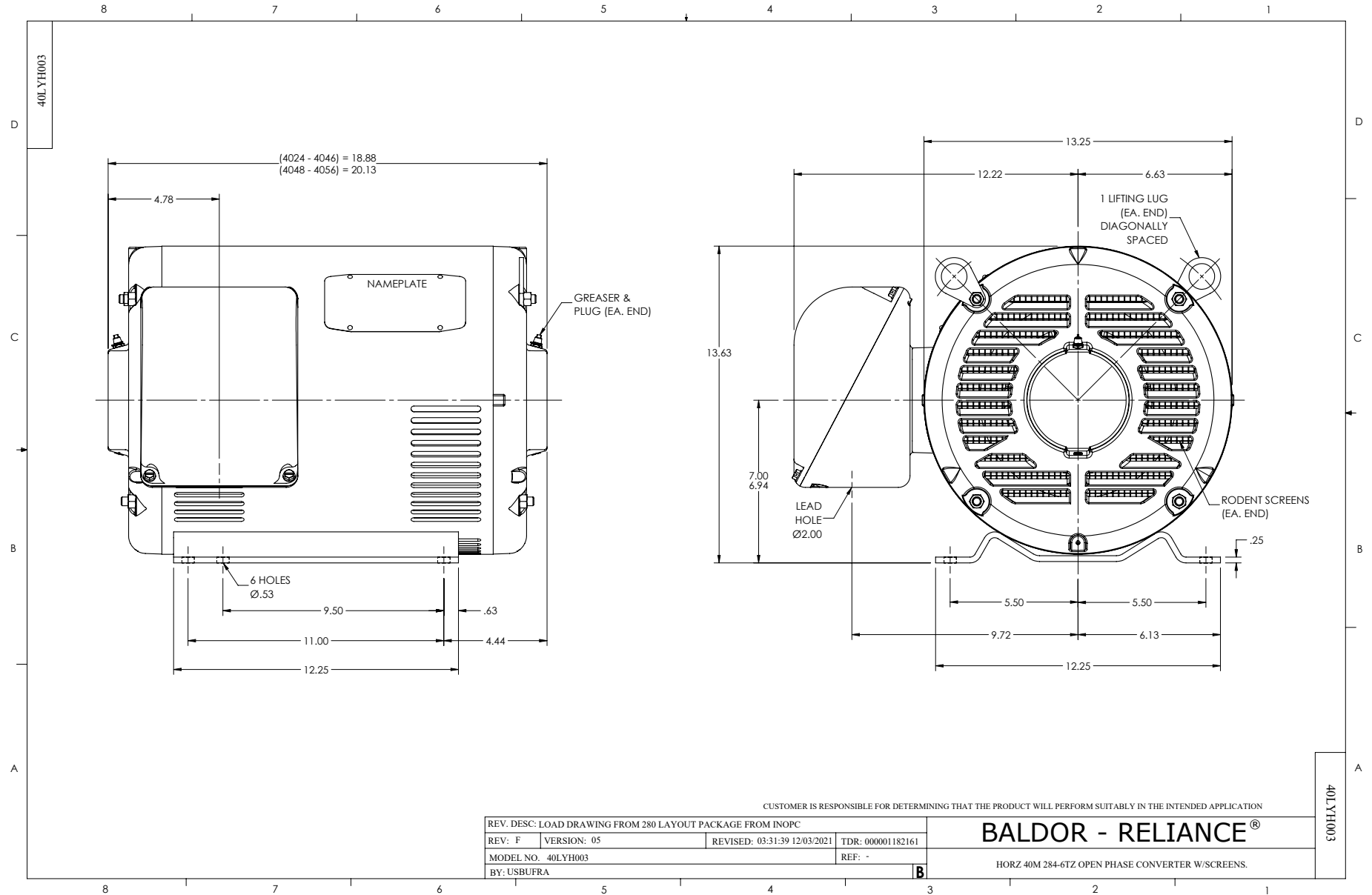
30 HP 3 PH 60 HZ 1800 RPM 240 V 4046M

Typical performance - not guaranteed values.

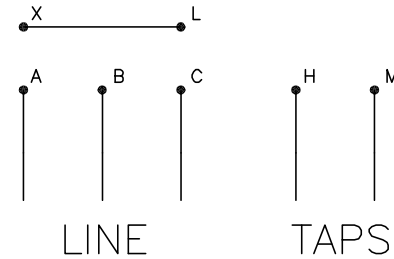
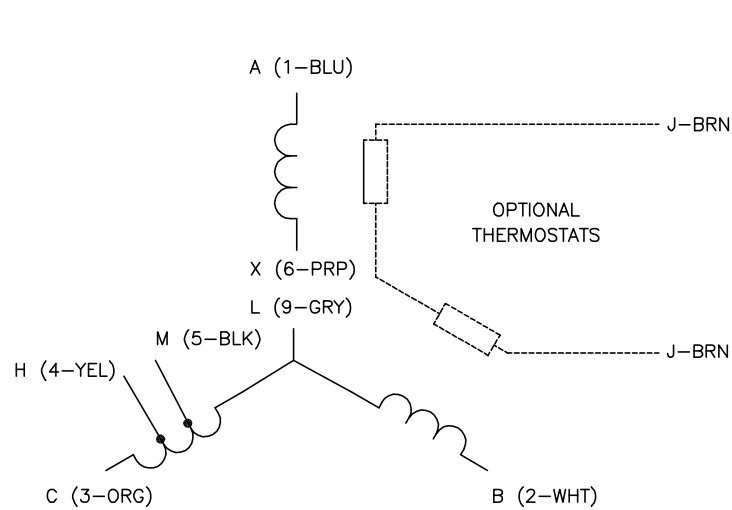
TORQUES (LB-FT): PO=316 PU=350 LR=355 LRA=379



2/16/2025 ACPERF, record # 72648



CD2171



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 BE NUMBERED AS SHOWN.

CD2171

REV. DESC: CORRECT # OF LEADS IN CLASSIFICATION		
REV. LTR: B	VERSION: 02	TDR: 000001119247
FILE: \AAA\00244\672	REVISED: 08:19:18 09/06/2019	BY: ENBRIRO
MTL: -	© □	

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3PH, SV, 5 LEADS, W/ 2 TAPS

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