

ABB BALDOR RELIANCE III

Customer information packet

AEM2334-4

20HP, 1770RPM, 3PH, 60HZ, 286U, 1046M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286U
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	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	UR CSA
Ambient Temperature	65 °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	23.000 A @ 460.0 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
High Voltage Full Load Amps	23.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	L
Type	AC
Mech. spec.	10M36
Base	
Status	PRD/A
Elec. spec.	10WGY977
Layout	10LYM036
Eff. date	07-19-2023
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	02-21-2015

KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 10 AWG
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1046M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.81 IN
Power Factor	84
Product Family	Automotive (Not For DC)
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
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	1770 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

NP1404									
CAT.NO.	AEM2334-4								
SPEC.	10M036Y977G1								
VOLTS	460								
AMP	23								
RPM	1770		HP	20					
FRAME	286U	HZ	60		PH	3			
SER.F.	1.00	CODE	G	DES	B	CL	F		
NEMA-NOM-EFF	93	PF	84						
G.MIN.EFF	91.7	CC	010A						
RATING	65C AMB-CONT								
LUBRICATION	POLYREX EM								
DE	6311	ODE	6309						
ENCL	TEFC	SER. #							

Accessories

Part number	Description	Multiplier
10-1305	C FACE KIT	A8
10EP1502A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 49354

Typical performance - not guaranteed values

Winding: 10WGY977-R014			Type: 1046M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		20	Full Load Torque		59.3 LB-FT	
Volts		460	Start Configuration		direct on line	
Full Load Amps		23	Breakdown Torque		189 LB-FT	
R.P.M.		1770	Pull-up Torque		76.6 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		95.9 LB-FT
NEMA Design Code		B	KVA Code	G	Starting Current	
Service Factor (S.F.)		1	No-load Current		7.85 A	
NEMA Nom. Eff.		93	Power Factor		84	Line-line Res. @ 25°C
Rating - Duty		65C AMB-CONT		Temp. Rise @ Rated Load		40°C
				Locked-rotor Power Factor		31.8
				Rotor inertia		3.66 LB-FT2

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	57	78	85	87	88	87
Efficiency	88.4	92.3	93.5	93.5	93.3	92.6
Speed	1793	1785	1779	1771	1763	1755
Line amperes	9.5	13.1	17.7	22.9	28.4	34.6

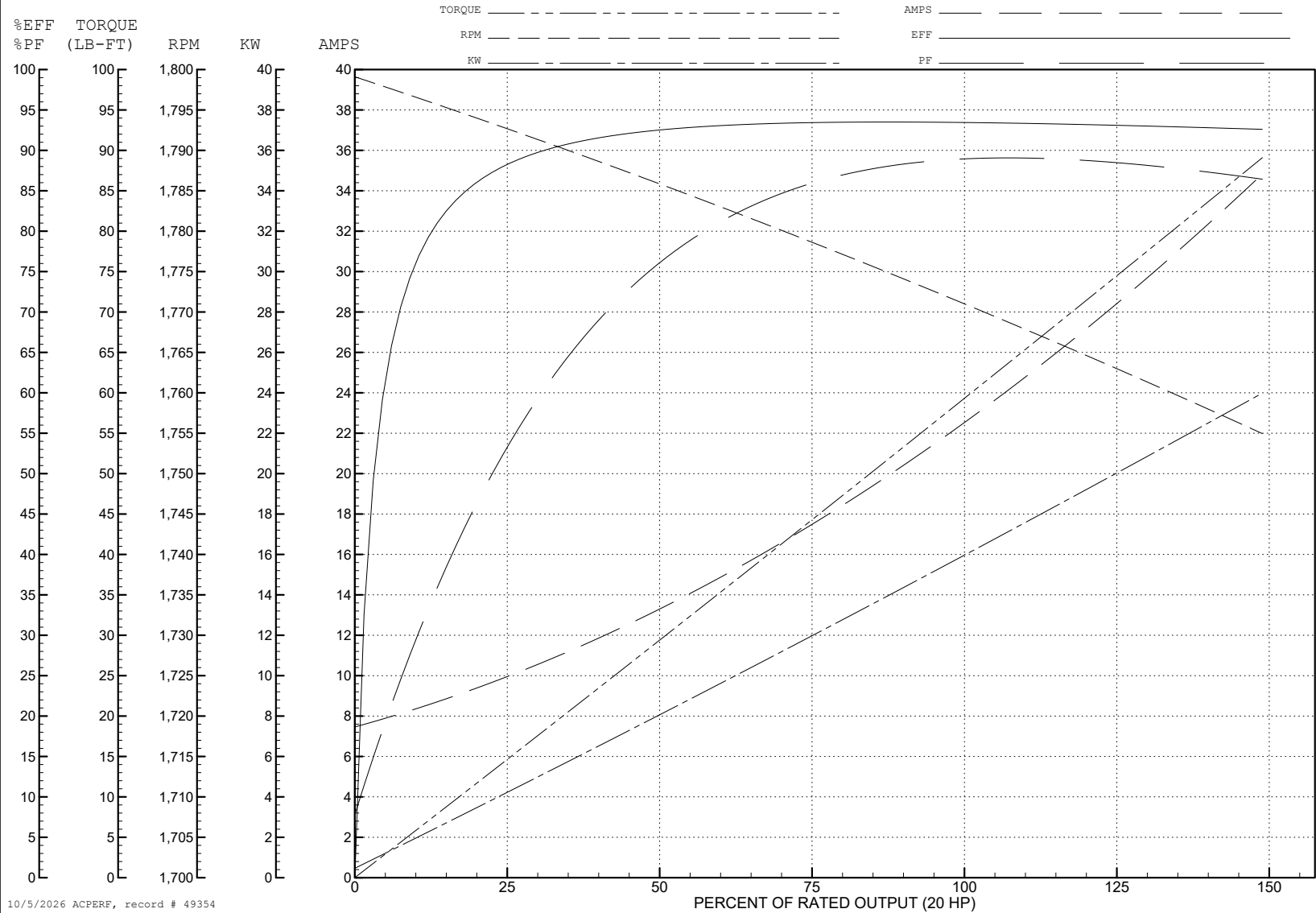
ABB Motors and Mechanical Inc.

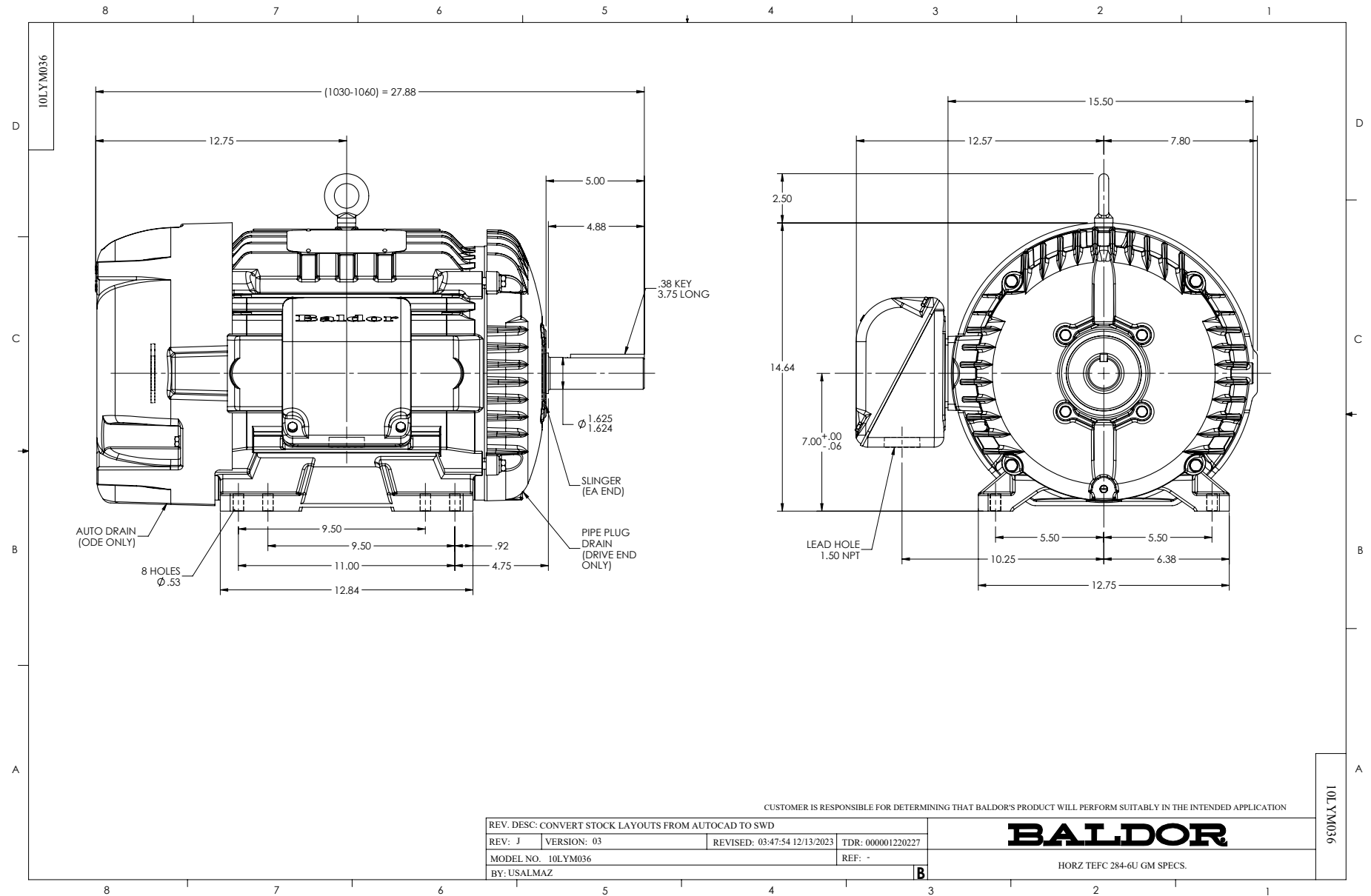
WINDING # 10WGY977

Typical performance - not guaranteed values.

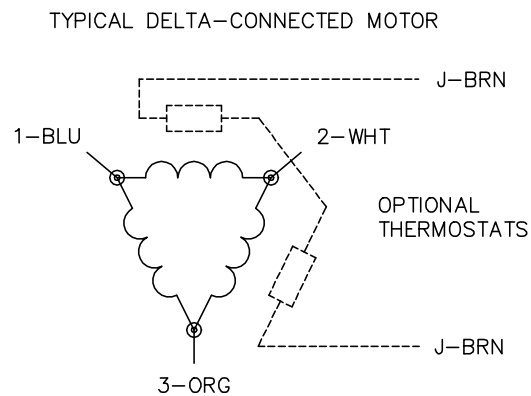
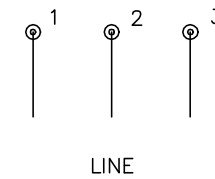
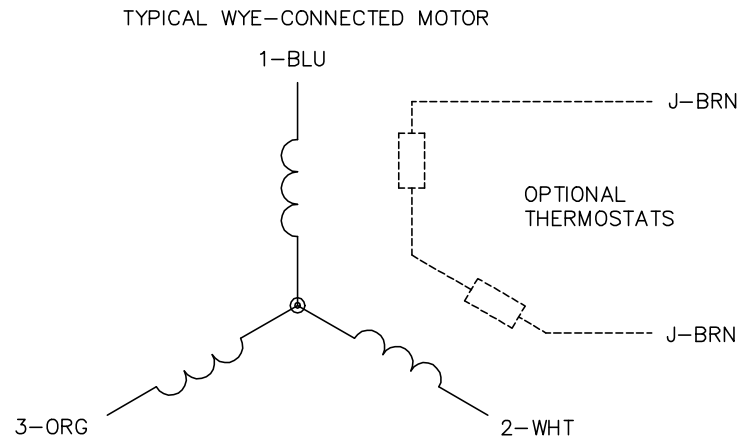
20 HP 3 PH 60 HZ 1770 RPM 460 V 1046M

TORQUES (LB-FT): PO=189 PU=76.6 LR=95.9 LRA=145





CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10: 24: 49 02/19/2019

BY: ENBRIRO

MTL: —


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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