

ABB BALDOR RELIANCE III

Customer information packet

IDXM7056T

20HP, 1770RPM, 3PH, 60HZ, 256TC, 0960M, XPFC, F

Class - CLI GP D

Division - Division I

Specifications

Enclosure	XPFC
Frame	256TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	20.000 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 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
Constant Torque Speed Range	30
Current @ Voltage	52.000 A @ 208.0 V 48.000 A @ 230.0 V 24.000 A @ 460.0 V
Design Code	A
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

Part Detail

Revision	K
Type	AC
Mech. spec.	09E963
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LYE963
Eff. date	01-31-2025
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	11-20-2017

Front Shaft Indicator	None
Haz Area Temp Code	T2B
Heater Indicator	No Heater
High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	26.00 IN
Power Factor	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
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	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None

Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP0890XPSLEV													
NO.							CC	010A					
S/N							TEMP CODE		T2B				
SPEC.	09E963T459G1						INV.TYPE		PWM				
CAT.NO.	IDXM7056T						C HP FR	60	C HP TO	90			
HP	20						CT HZ FROM		30	CT HZ TO		60	
VOLTS	230/460						VT HZ FROM		6	VT HZ TO		60	
AMPS	48/24				MAG CUR		20.8/10.4						
RPM	1770				MX RPM		2700						
HZ	60	PH	3	CL	F	NOM.EFF.		93					
SER.F.	1.00	DES	A	SL HZ	1	WK2		2.62					
FRAME	256TC	RATING		40C AMB-CONT									

AC Induction Motor Performance Data

Record # 68068

Typical performance - not guaranteed values

Winding: 09WGT459-R009			Type: 0960M		Enclosure: XPFC			
Nameplate Data			460 V, 60 Hz: High Voltage Connection					
Rated Output (HP)		20	Full Load Torque		59.27 LB-FT			
Volts		230/460	Start Configuration		direct on line			
Full Load Amps		48/24	Breakdown Torque		232 LB-FT			
R.P.M.		1770	Pull-up Torque		126 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		141 LB-FT		
NEMA Design Code		A	KVA Code	J	Starting Current		198 A	
Service Factor (S.F.)		1	No-load Current		10.4 A			
NEMA Nom. Eff.		93	Power Factor		83	Line-line Res. @ 25°C		0.33814 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		58°C	
					Locked-rotor Power Factor		26.5	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	45	67	78	83	86	87
Efficiency	89.2	93	93.7	93.6	93.1	92.4
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3
Line amperes	11.8	15	19.2	24	29.3	34.9

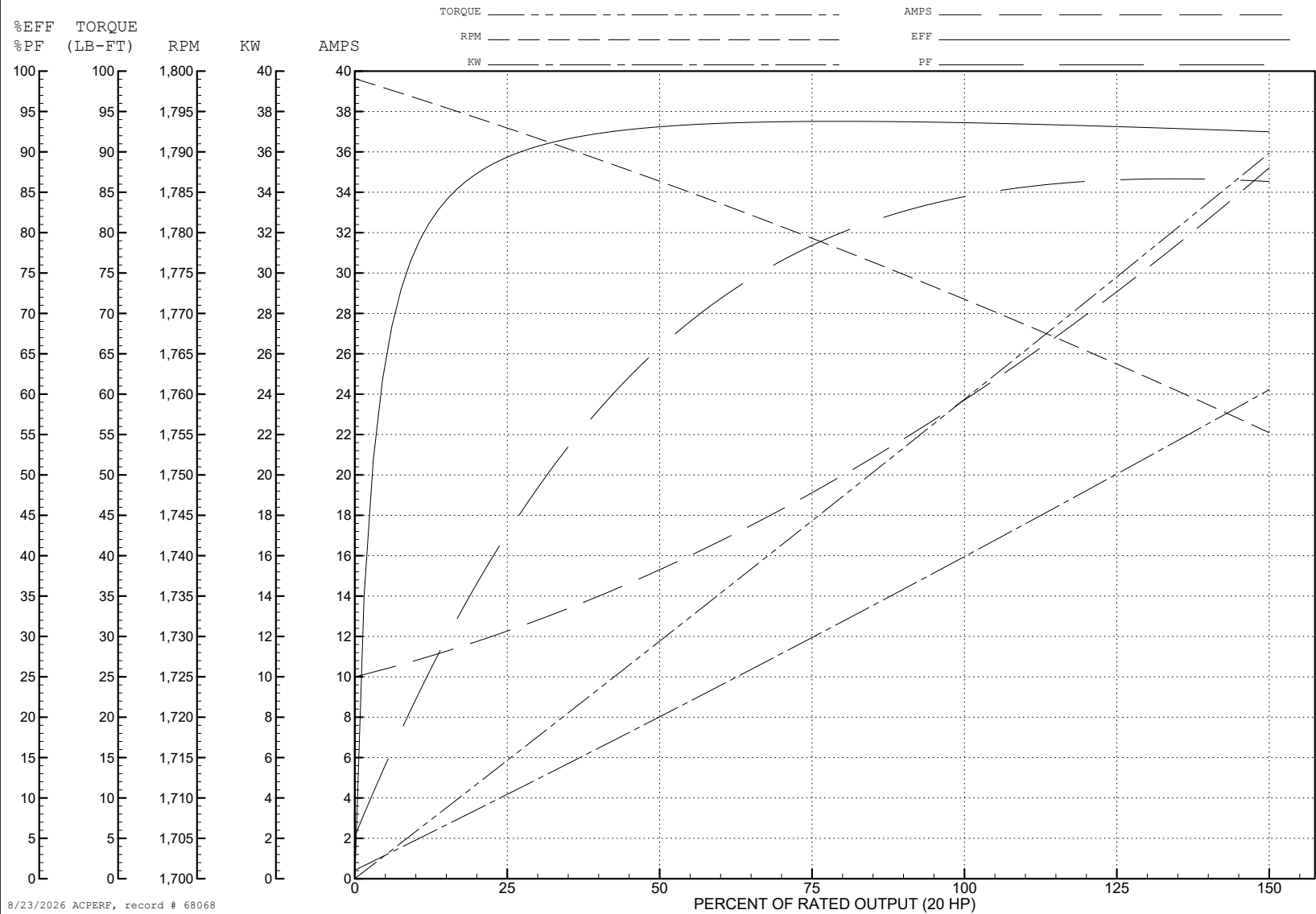
ABB Motors and Mechanical Inc.

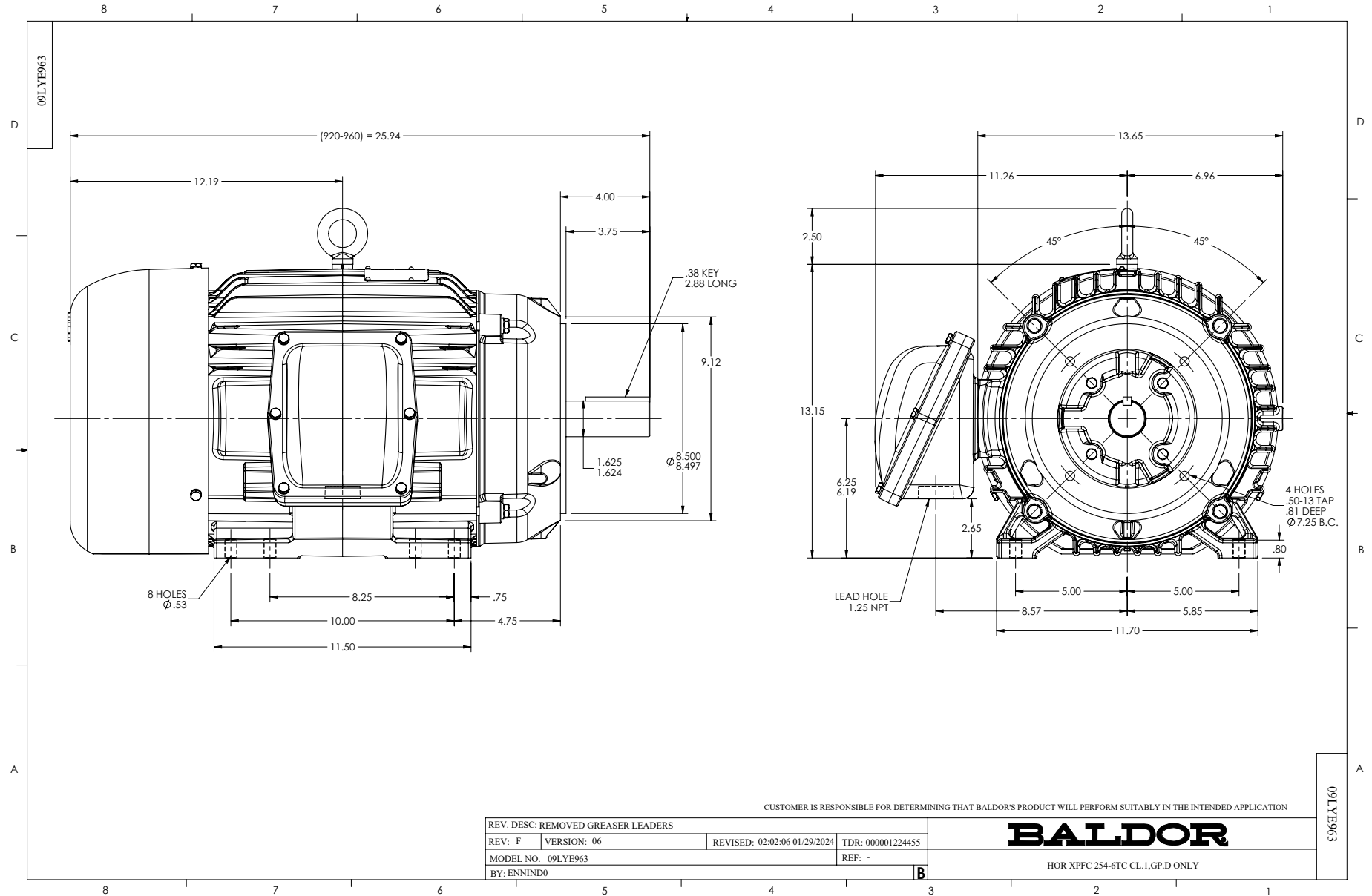
WINDING # 09WGT459

Typical performance - not guaranteed values.

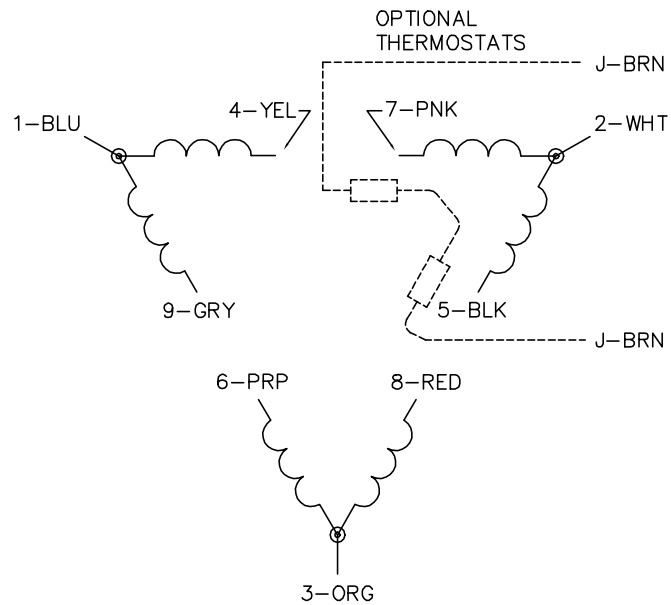
20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

TORQUES (LB-FT): PO=232 PU=126 LR=141 LRA=198

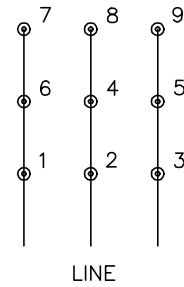




CD0180



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.

CD0180

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

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