

ABB BALDOR RELIANCE III

Customer information packet

VDRX18544T

5HP, 1750//1450RPM, 3PH, 60/50HZ, 184TC, XPFC

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	184TC
Frame Material	Iron
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ 3.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	UL CSA EEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	10.200 A @ 190.0 V 13.200 A @ 230.0 V 5.100 A @ 380.0 V 6.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	06WGY545
Layout	06LYG594
Eff. date	02-26-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	06-21-2019

Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	5.1 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.31 IN
Power Factor	81
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1750 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

NP1401XPSLEV												
NO.							CC	010A				
S/N							TEMP CODE		T3C			
SPEC.	06-0000-0145						INV.TYPE		PWM			
CAT.NO.	VDRX18544T						C HP FR	60	C HP TO	90		
HP	5//3						CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380						VT HZ FROM		6	VT HZ TO		60
AMPS	13.2/6.6//10.2/5.1						MAG CUR		6/3			
RPM	1750//1450						MX RPM		2700			
HZ	60//50	PH	3	CL	F	NOM.EFF.		89.5				
SER.F.	1.00	DES	B	SL HZ		1.7	WK2	0.39				
FRAME	184TC	RATING		40C AMB-CONT								
	55C AMB @ 1.0 SF											
	1.15 SF SINEWAVE						NEMA MG-1 PT 5,IP55					

AC Induction Motor Performance Data

Record # 72834

Typical performance - not guaranteed values

Winding: 06WGY545-R005			Type: 0642M		Enclosure: XPFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5//3		Full Load Torque		15 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		13.2/6.6//10.2/5.1		Breakdown Torque		53.9 LB-FT		
R.P.M.		1750//1450		Pull-up Torque		22.4 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		31.8 LB-FT	
NEMA Design Code		B		KVA Code	J	Starting Current		46.6 A
Service Factor (S.F.)		1		No-load Current		3.02 A		
NEMA Nom. Eff.		89.5	Power Factor		79	Line-line Res. @ 25°C		2.63 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		53°C		
				Locked-rotor Power Factor		40.5		
				Rotor inertia		0.391 LB-FT2		

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	41	63	75	81	84	85
Efficiency	85.1	89.7	90.3	89.8	88.4	86.8
Speed	1789	1777	1765	1752	1737	1721
Line amperes	3.35	4.14	5.21	6.45	7.91	9.47

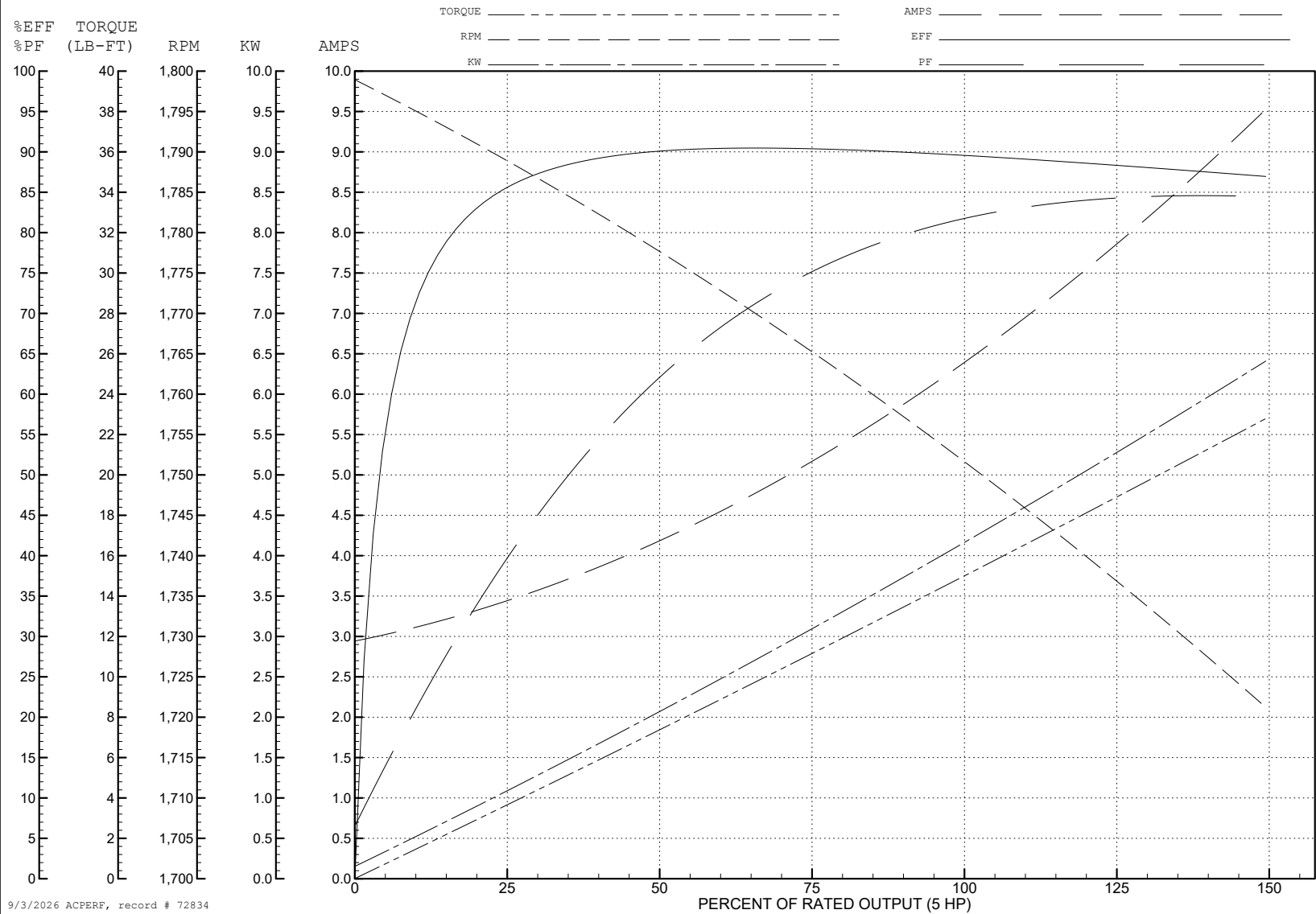
ABB Motors and Mechanical Inc.

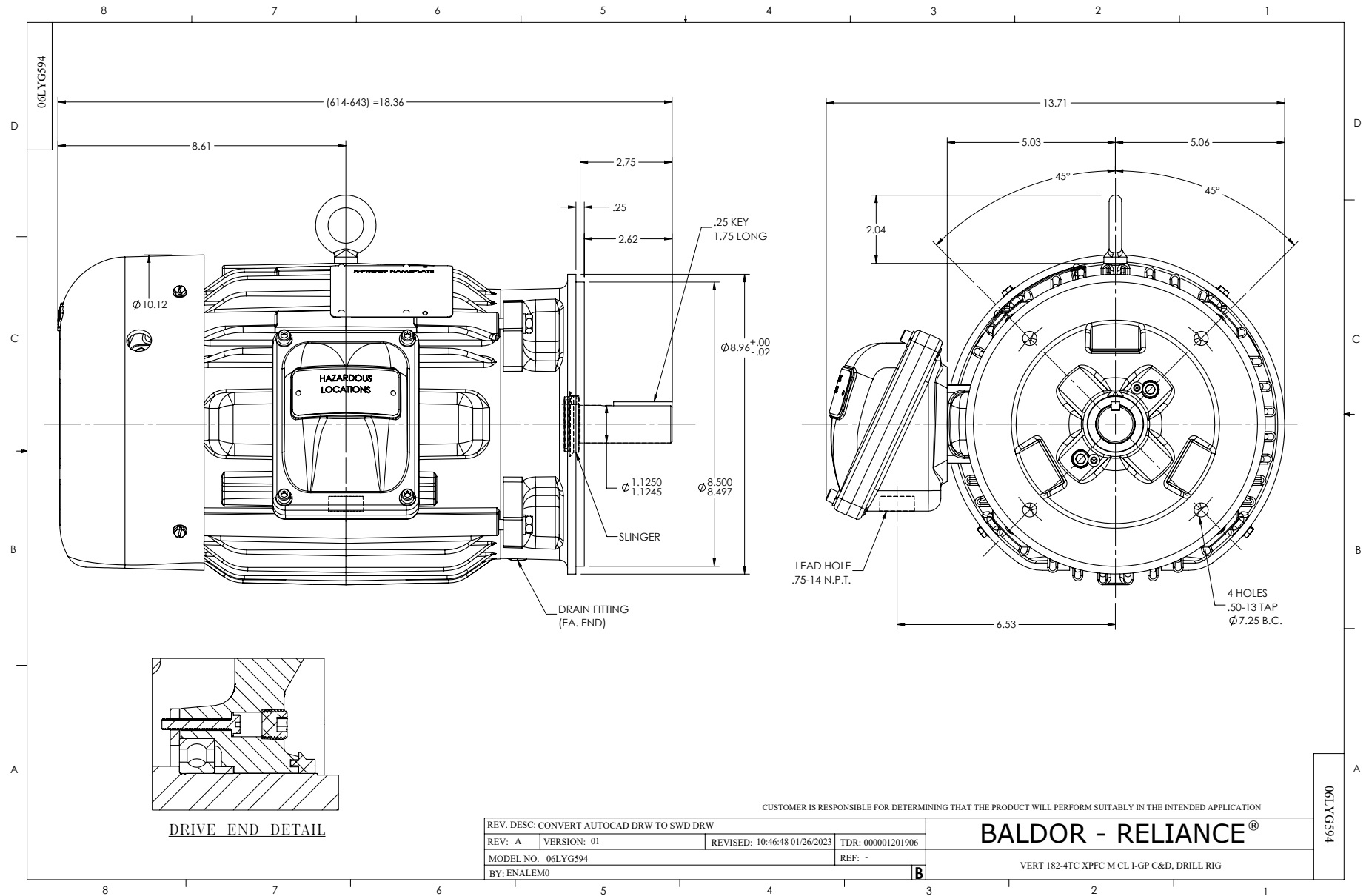
WINDING # 06WGY545

Typical performance - not guaranteed values.

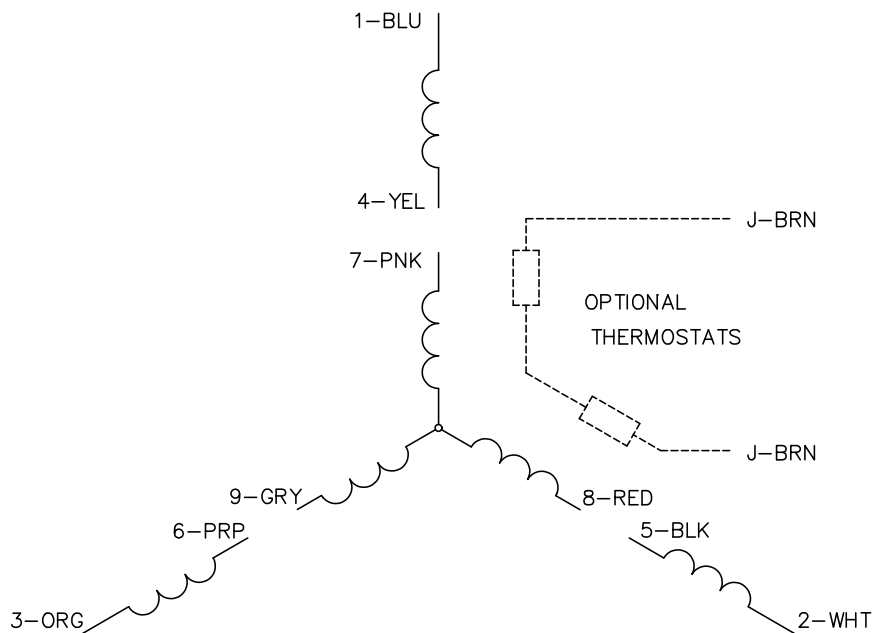
5 HP 3 PH 60 HZ 1752 RPM 460 V 0642M

TORQUES (LB-FT) : PO=53.9 PU=22.4 LR=31.8 LRA=46.6

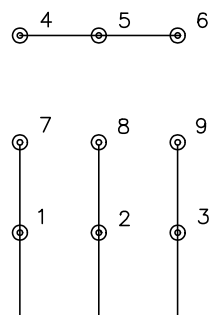




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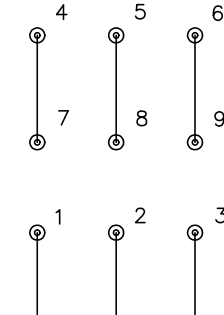


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E

BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

900000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005