

ABB BALDOR RELIANCE III

Customer information packet

IDM4103T

54M 4P TEBC HOR 286T T'STATS INV DUTY

Class - None

Division - Not Applicable

Specifications

Enclosure	TEBC
Frame	286T
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	25.000 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 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	BLOWER
Current @ Voltage	31.000 A @ 460.0 V 62.000 A @ 230.0 V 64.000 A @ 208.0 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 Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	31.0 a

Part Detail

Revision	E
Type	AC
Mech. spec.	10T004
Base	
Status	PRD/A
Elec. spec.	10WGZ651
Layout	10LYT004
Eff. date	08-18-2025
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	03-19-2019

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1054M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	34.48 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 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

NP1163L									
CAT NO	IDM4103T								
SPEC.	10T004Z651G1								
FRAME	286T		HP	25	TE				
VOLTS	230/460								
MAG CUR	27.2/13.6			FLA	62/31				
RPM	1775			RPM MAX	2700				
HZ	60		PH	3		CLASS	H		
SER.F.	1.00		DES	A		SL HZ	0.8		
NEMA-NOM-EFF	93.6		WK2	4.13					
BLWR V		PH		HZ		A			
RATING	40C AMB-CONT								
DE BRG	6311		ODE BRG	6309					
CC	010A	SN							
	1000:1 CT, 1000:1 VT								

ABB BALDOR/460 RELIANCE III		CUSTOMER INFORMATION PACKET		MAX SAFE RPM 2700	WYE CONNECT OHMS PER PHASE (BASE RATING, 20C)	
HP 25 HP	BASE SPEED 1778	PHASE/HZ 3/60	Base Volt 460	NL AMPS 13.60	Slips(HZ) 0.74	WK2 (LB-FT2) 4.310
					R1 0.121	X1 0.578
					R2 0.588	X2 0.512
					R2B 0.086	X2B 0.790
					R2E 0.025	XM 16.600

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1777.8	25.1	74.0	460	60	30.6
Max Speed	2666	25.1	49.4	460	90	27.9
Min Speed	0	0.0	74.0	15.59	0.74	30.6

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1798.9	0.0	0.0	460	60	13.6
1/4	1794.1	6.2	18.2	460	60	15.3
1/2	1789.3	12.6	36.9	460	60	19.3
3/4	1783.5	18.8	55.3	460	60	24.6
Full Load	1777.8	25.1	74.0	460	60	30.6
O/L	1753	50.1	150.0	460	60	59.4

Blower Data	Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data
Vector PWM Inverter Duty

BALDOR
A MEMBER OF THE ABB GROUP

DR BY USBRRAN1
CK BY
APP BY USBRRAN1
DATE 10/19/2017

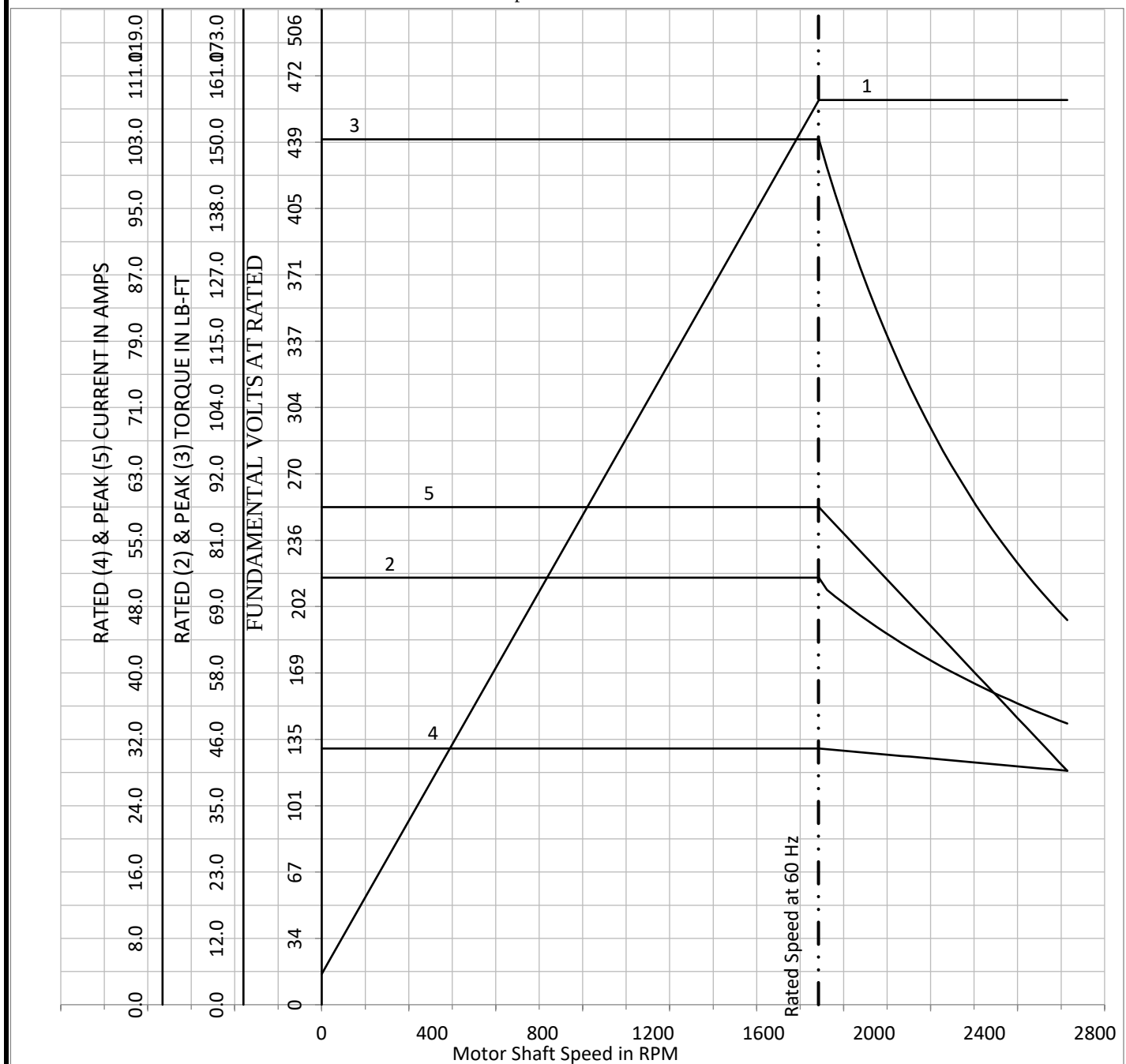
**A-C MOTOR
PERFORMANCE
CURVES**
10WGZ651
Record: 67469

HP 25 HP
 BASE SPEED 1777.80005
 PHASE/HZ 3/60

MAX SAFE RPM 2700
 Base Volt 460
 NL AMPS 13.60
 Slips(HZ) 0.74
 WK2 (LB-FT2) 4.310

WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)
 R1 0.121 X1 0.578
 R2 0.588 X2 0.512
 R2B 0.086 X2B 0.790
 R2E 0.025 XM 16.600

Vector PWM Inverter Duty
 Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

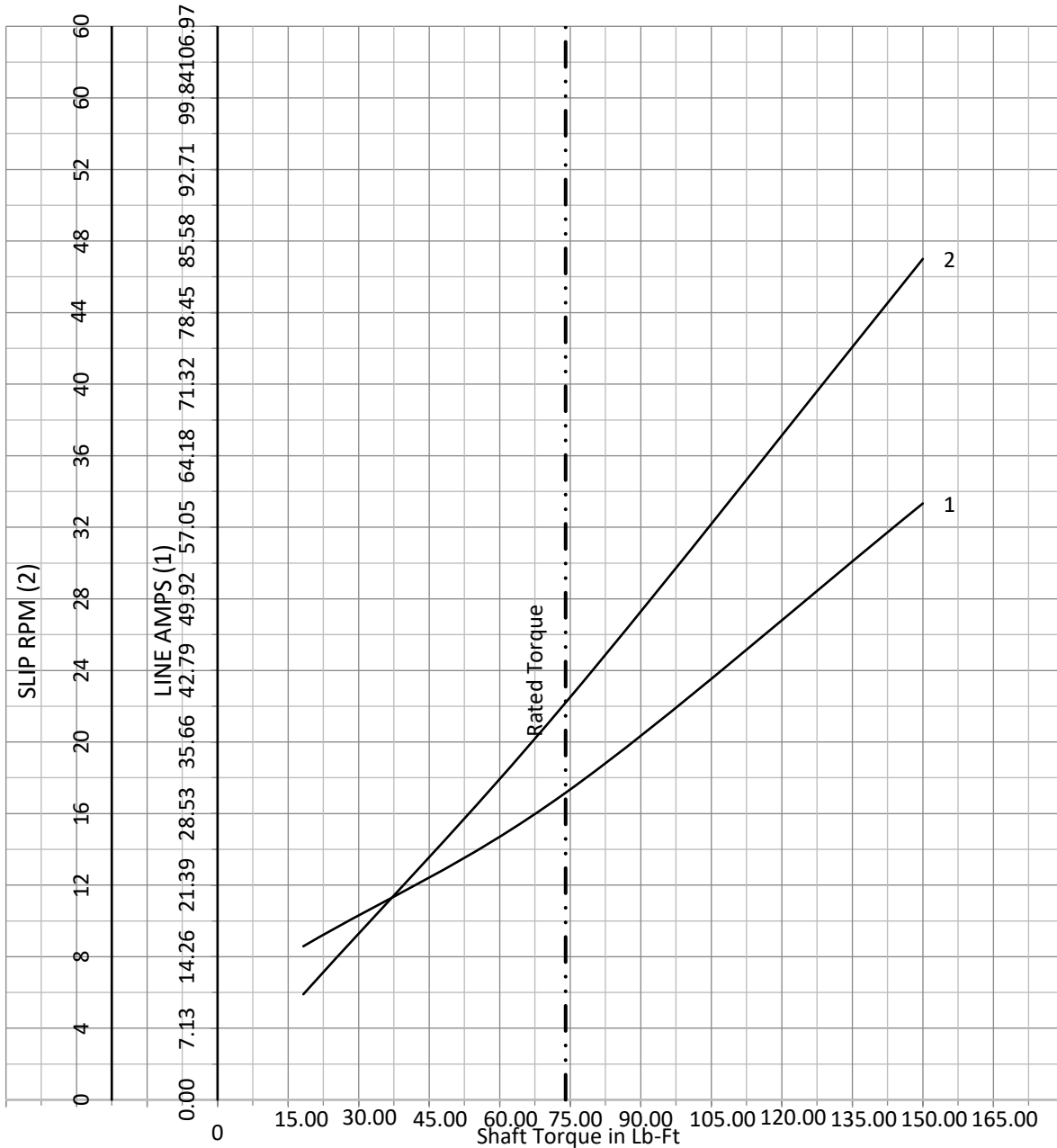


DR BY USBRRAN1
 CK BY
 APP BY USBRRAN1
 DATE 10/19/2017

**A-C MOTOR
 PERFORMANCE
 CURVES**
10WGZ651
 Record: 67469

ABB BALDOR RELIANCE		336/460 62/131	CUSTOMER INFORMATION PACKET		MAX SAFE RPM 2700 Base Volt 460	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
HP 25 HP		BASE SPEED 1777.800049		Slips(HZ) 0.74		R1 0.121	X1	0.578	
PHASE/HZ 3/60				WK2 (LB-FT2) 4.310		R2 0.588	X2	0.512	
						R2B 0.086	X2B	0.790	
						R2E 0.025	XM	16.600	

Vector PWM Inverer Duty
Vaiable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

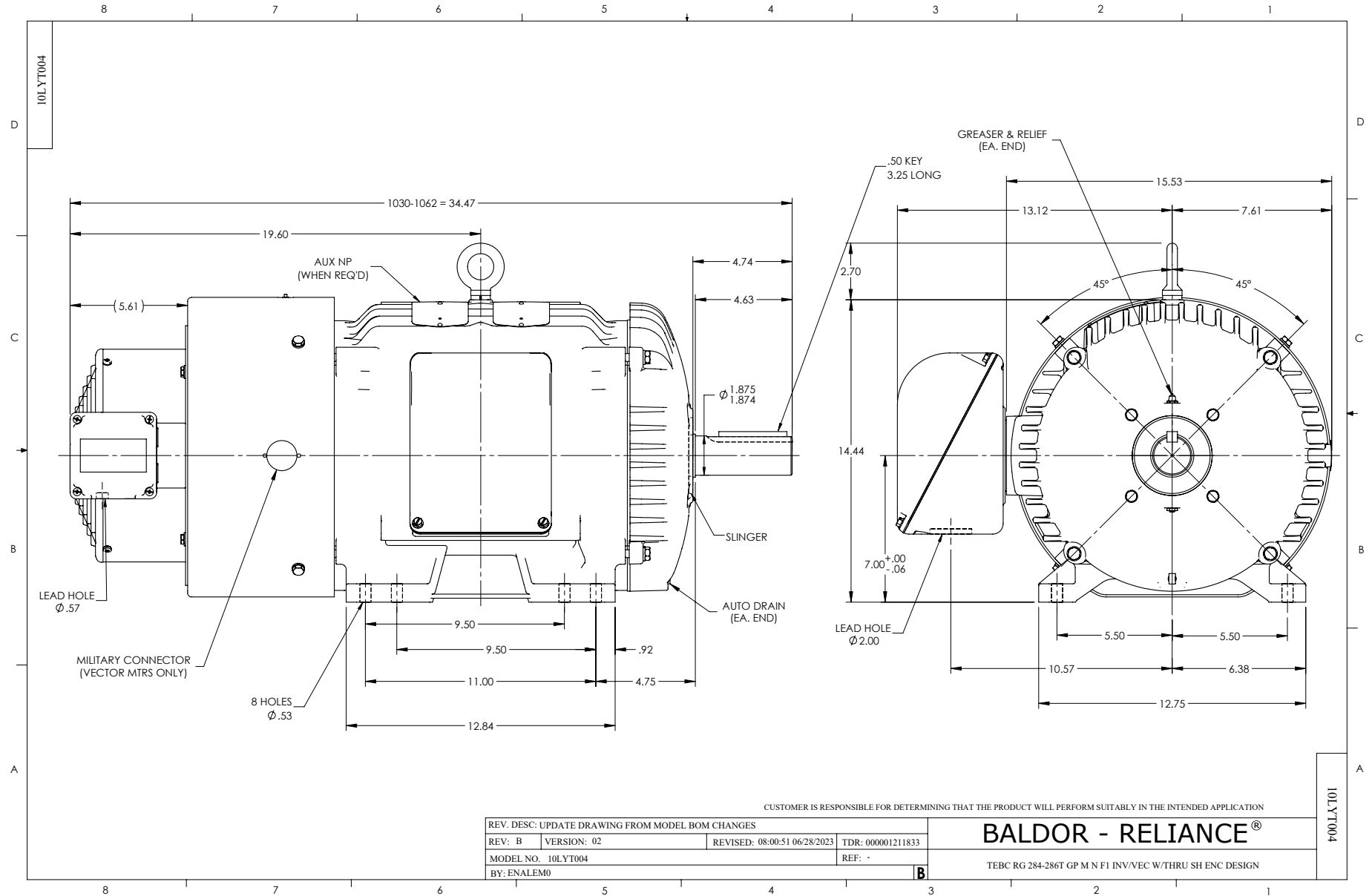


DR BY USBRRAN1
CK BY
APP BY USBRRAN1
DATE 10/19/2017

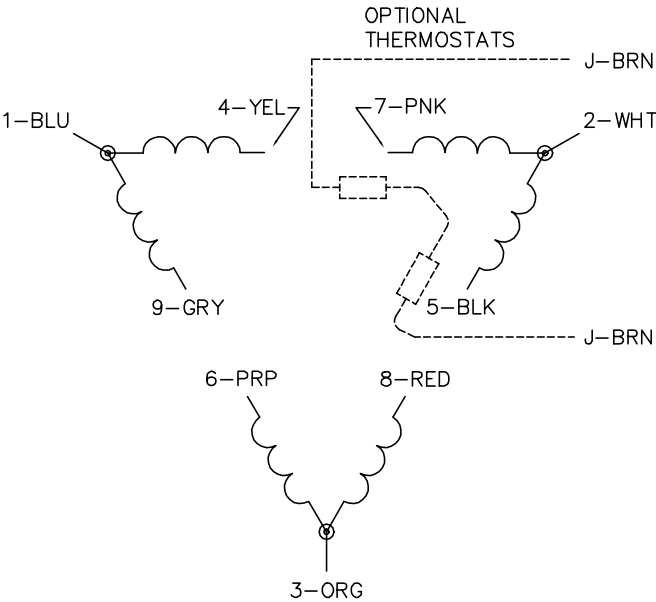
**A-C MOTOR
PERFORMANCE
CURVES**

10WGZ651

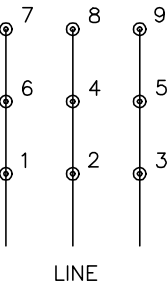
Record: 67469



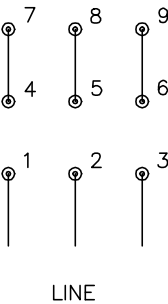
CD0180



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
SH 1 of 1