

ABB BALDOR RELIANCE III

Customer information packet

IDM3770T-5

38M 4P TEBC HOR 213TC T'STATS INVERTER

Class - None

Division - Not Applicable

Specifications

Enclosure	TEBC
Frame	213TC
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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA UR NEMA PREMIUM (OLD LOGO) NEMA PREMIUM CSA EEV
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	7.500 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.5 a

Part Detail

Revision	E
Type	AC
Mech. spec.	07D515
Base	
Status	PRD/A
Elec. spec.	07WGX817
Layout	07LYD515
Eff. date	09-30-2025
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	03-18-2019

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	4000 rpm
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.58 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.375 IN
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

NP4009L									
CAT.NO.	IDM3770T-5								
SPEC.	07D515X817G1								
FRAME	213TC	H.P.		7.5 TE					
VOLTS	575								
MAG. CUR.	3.3	F.L. AMPS				7.5			
R.P.M.	1770	R.P.M. MAX			4000				
HZ.	60	PH.	3	CLASS		H			
SER.F.	1.00	DES.	A	SL HZ		1			
NEMA NOM. EFF.	91.7	WK2	0.934						
BLOWER	V	PH		HZ		AMPS			
RATING	40C AMB-CONT								
DE	6307	ODE	6206						
CC	010A	SN							
	1000:1 CT/VT								

NP VOLTS	575					WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)
NP AMPS	7.5	Base Volt	575	R1	1.180	X1 3.790
HP	7.5	NL AMPS	3.66	R2	0.666	X2 2.890
BASE SPEED	1771	Slip (HZ)	0.97			XM 85.700
PHASE/HZ	3/60	WK ² (lb-ft ²)	0.934			

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1771	7.5	22.1	575	60	7.7
Max Speed	2656	7.5	14.8	575	90	7.1
CT Min Speed	1.771	0.007	22.1	0.58	0.06	7.7

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	575	60	3.7
1/4	1793	1.9	5.5	575	60	4.1
1/2	1786	3.7	11.0	575	60	5.0
3/4	1779	5.6	16.6	575	60	6.2
Full Load	1771	7.5	22.1	575	60	7.7
O/L	1740	14.9	45.0	575	60	14.8

Blower Data

Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data



DR BY USBRRAN1
CK BY CD
APP BY USBRRAN1
DATE 11/1/2024
**A-C MOTOR
PERFORMANCE
CURVES**
07WGX817

Record: 36497

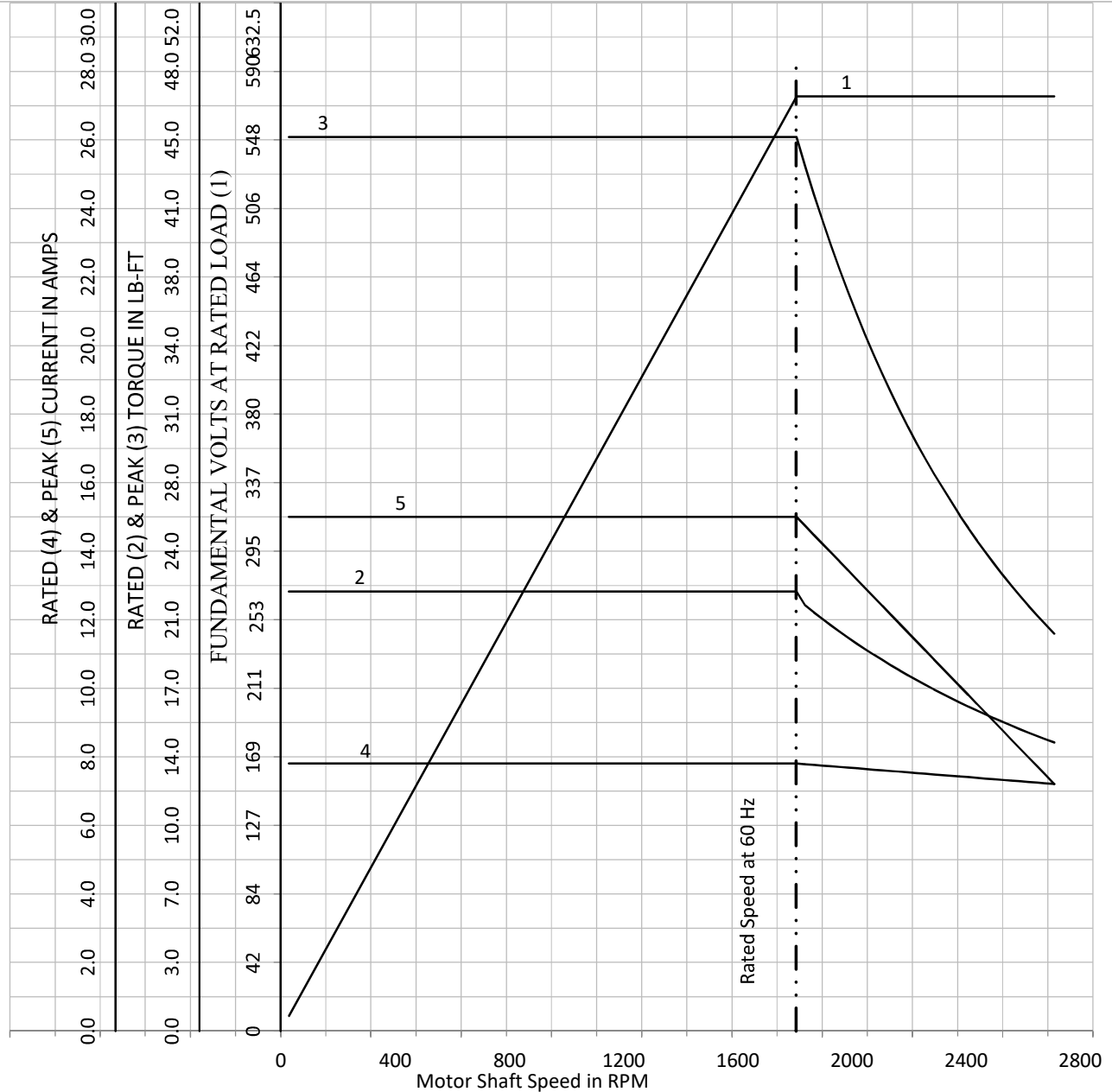
NP VOLTS 575
NP AMPS 7.5
HP 7.5
BASE SPEED 1771
PHASE/HZ 3/60

Base Volt 575
NL AMPS 3.66
Slip (HZ) 0.97
WK² (lb-ft²) 0.934

WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)

R1 1.180 X1 3.790
R2 0.666 X2 2.890
XM 85.700

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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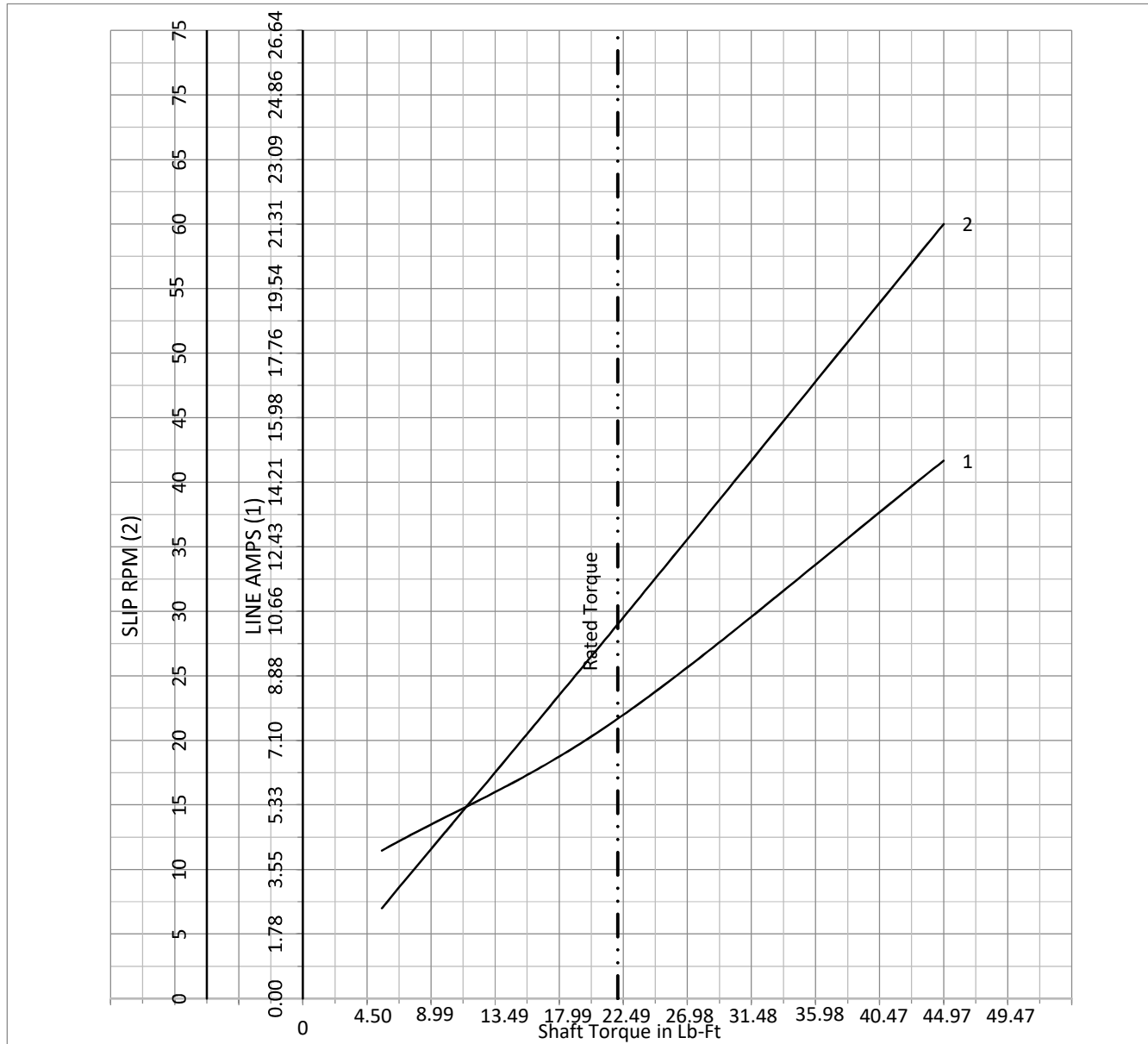
DR BY USBRRAN1
CK BY CD
APP BY USBRRAN1
DATE 11/1/2024

**A-C MOTOR
PERFORMANCE
CURVES**
07WGX817

Record: 36497

NP VOLTS	575	0	0	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	7.5	Base Volt	575	R1	1.180	X1	3.790
HP	7.5	NL AMPS	3.66	R2	0.666	X2	2.890
BASE SPEED	1771	Slip (HZ)	0.97			XM	85.700
PHASE/HZ	3/60	WK2 (lb-ft2)	0.934				

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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 DR BY USBRRAN1

 CK BY CD

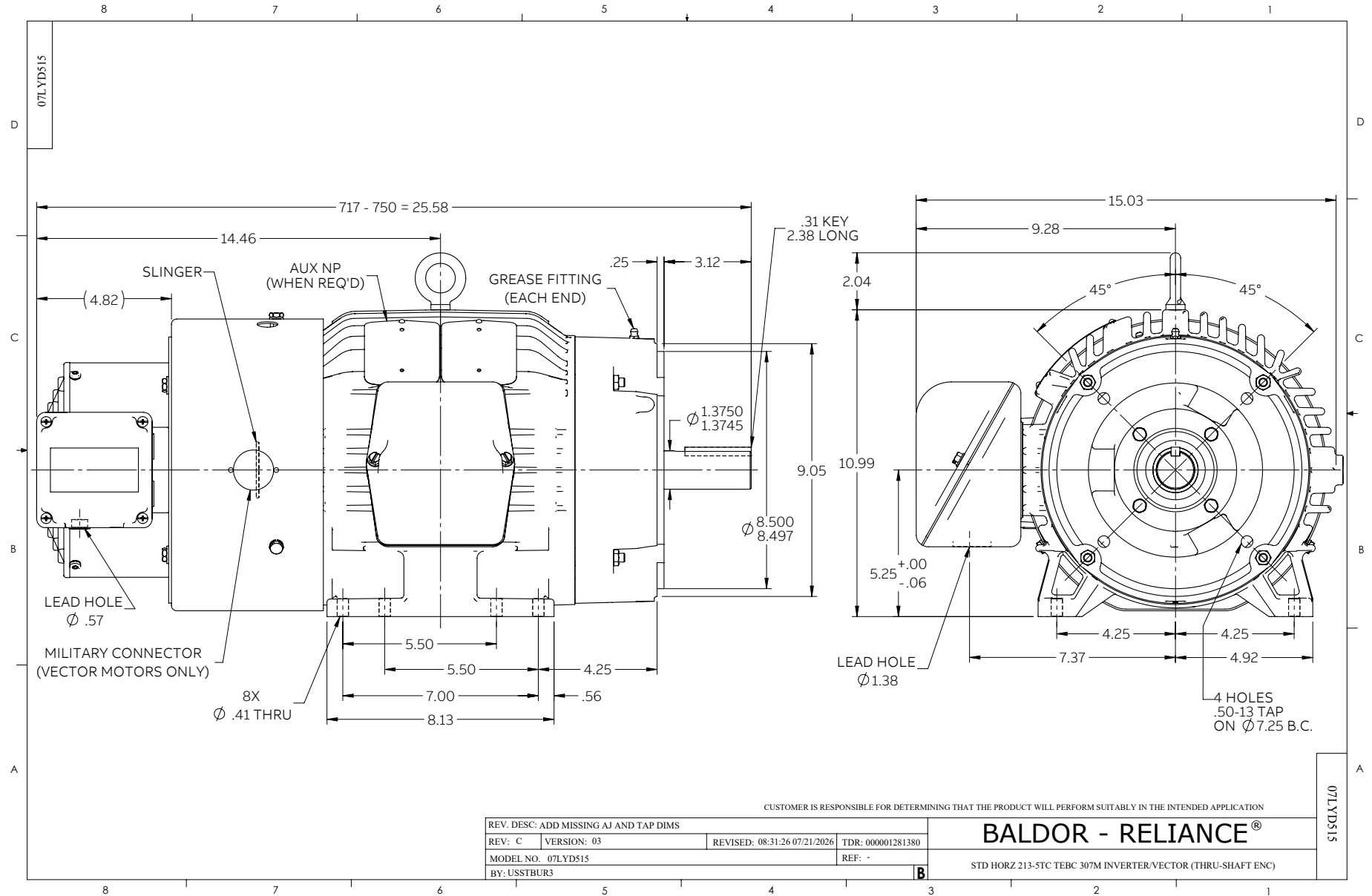
 APP BY USBRRAN1

 DATE 11/1/2024

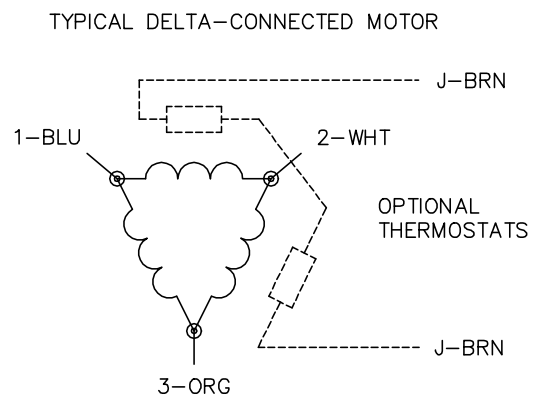
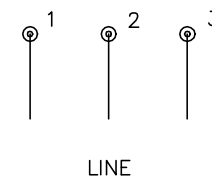
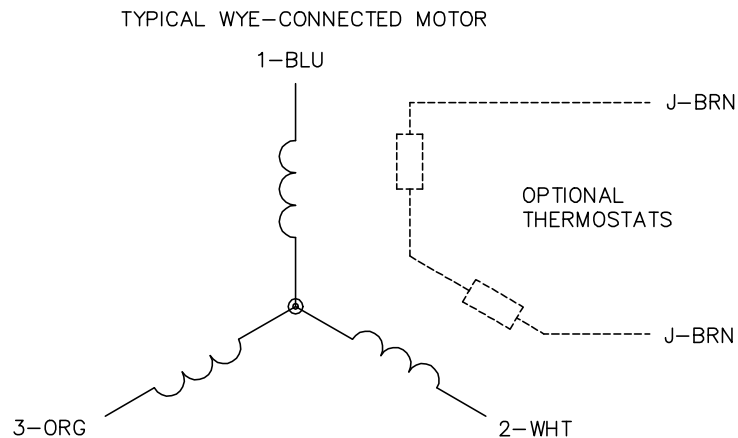
**A-C MOTOR
PERFORMANCE
CURVES**

07WGX817

Record: 36497



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

SH 1 of 1