

**BALDOR • RELIANCE**

---

# Customer information packet

## IDM4115T

50HP, 1775RPM, 3PH, 60HZ, 326T, 1272M, TEBC, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEBC
Frame	326T
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	50.000 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	UR CSA
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	116.000 A @ 230.0 V 58.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	58.0 a
Insulation Class	H

## Part detail

Revision	F
Type	AC
Mech. spec.	12T107
Base	
Status	PRD/A
Elec. spec.	12WGZ279
Layout	12LYT107
Eff. date	08-18-2025
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	02-03-2021

<b>Inverter Code</b>	<b>Inverter Duty</b>
<b>KVA Code</b>	<b>H</b>
<b>Lifting Lugs</b>	<b>Standard Lifting Lugs</b>
<b>Locked Bearing Indicator</b>	<b>Locked Bearing</b>
<b>Max Speed</b>	<b>3900 rpm</b>
<b>Motor Lead Quantity/Wire Size</b>	<b>9 @ 6 AWG</b>
<b>Motor Lead Termination</b>	<b>Flying Leads</b>
<b>Motor Standards</b>	<b>NEMA</b>
<b>Motor Type</b>	<b>1272M</b>
<b>Mounting Arrangement</b>	<b>F1</b>
<b>Number of Poles</b>	<b>4</b>
<b>Overall Length</b>	<b>36.92 IN</b>
<b>Power Factor</b>	<b>85</b>
<b>Product Family</b>	<b>General Purpose</b>
<b>Pulley End Bearing Type</b>	<b>Ball</b>
<b>Pulley Face Code</b>	<b>Standard</b>
<b>Pulley Shaft Indicator</b>	<b>Standard</b>
<b>Rodent Screen</b>	<b>None</b>
<b>RoHS Status</b>	<b>ROHS NON-COMPLIANT</b>
<b>Service Factor</b>	<b>1.00</b>
<b>Shaft Diameter</b>	<b>2.125 IN</b>
<b>Shaft Ground Indicator</b>	<b>No Shaft Grounding</b>
<b>Shaft Rotation</b>	<b>Reversible</b>
<b>Shaft Slinger Indicator</b>	<b>Shaft Slinger</b>
<b>Speed</b>	<b>1775 rpm</b>
<b>Speed Code</b>	<b>Single Speed</b>
<b>Starting Method</b>	<b>Direct on line</b>
<b>Thermal Device - Bearing</b>	<b>None</b>
<b>Thermal Device - Winding</b>	<b>Normally Closed Thermostat</b>
<b>Vibration Sensor Indicator</b>	<b>No Vibration Sensor</b>
<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>

**Nameplate**

<b>NP1163L</b>	
<b>CAT NO</b>	IDM4115T
<b>SPEC.</b>	12T107Z279G1
<b>FRAME</b>	326T <b>HP</b> 50 TE
<b>VOLTS</b>	230/460
<b>MAG CUR</b>	40/20 <b>FLA</b> 116/58
<b>RPM</b>	1775 <b>RPM MAX</b> 3900
<b>HZ</b>	60 <b>PH</b> 3 <b>CLASS</b> H
<b>SER.F.</b>	1.00 <b>DES</b> A <b>SL HZ</b> 0.83
<b>NEMA-NOM-EFF</b>	94.5 <b>WK2</b> 9.59
<b>BLWR V</b>	<b>PH</b> <b>HZ</b> <b>A</b>
<b>RATING</b>	40C AMB-CONT
<b>DE BRG</b>	6312 <b>ODE BRG</b> 6311
<b>CC</b>	010A <b>SN</b>
	1000:1 CT, 1000:1 VT

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN. EQ. CKT. OHMS PER PHASE (BASE RATING, 20C)
NP AMPS	116/58	Base Volt	460	R1 0.057 X1 0.352
HP	50HP	NL AMPS	20.8	R2 0.050 X2 0.440
BASE SPEED	1800	Slips (Hz)	0.80	XM 11.900
PHASE/HZ	3/60	WK <sup>2</sup> (lb-ft <sup>2</sup> )	9.59	

**Rated Full Load Data**

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1776	50.1	148.0	460	60	57.9
Max Speed	2663	50.0	98.5	460	90	55.9
Min Speed	0	0.0	148.0	18.38	0.80	57.9

**Load Performance at Base Speed**

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	460	60	20.8
1/4	1794	12.5	36.5	460	60	24.8
1/2	1788	25.0	73.5	460	60	33.9
3/4	1782	37.7	111.0	460	60	45.3
Full Load	1776	50.1	148.0	460	60	57.9
O/L	1753	99.8	299.0	460	60	116.0

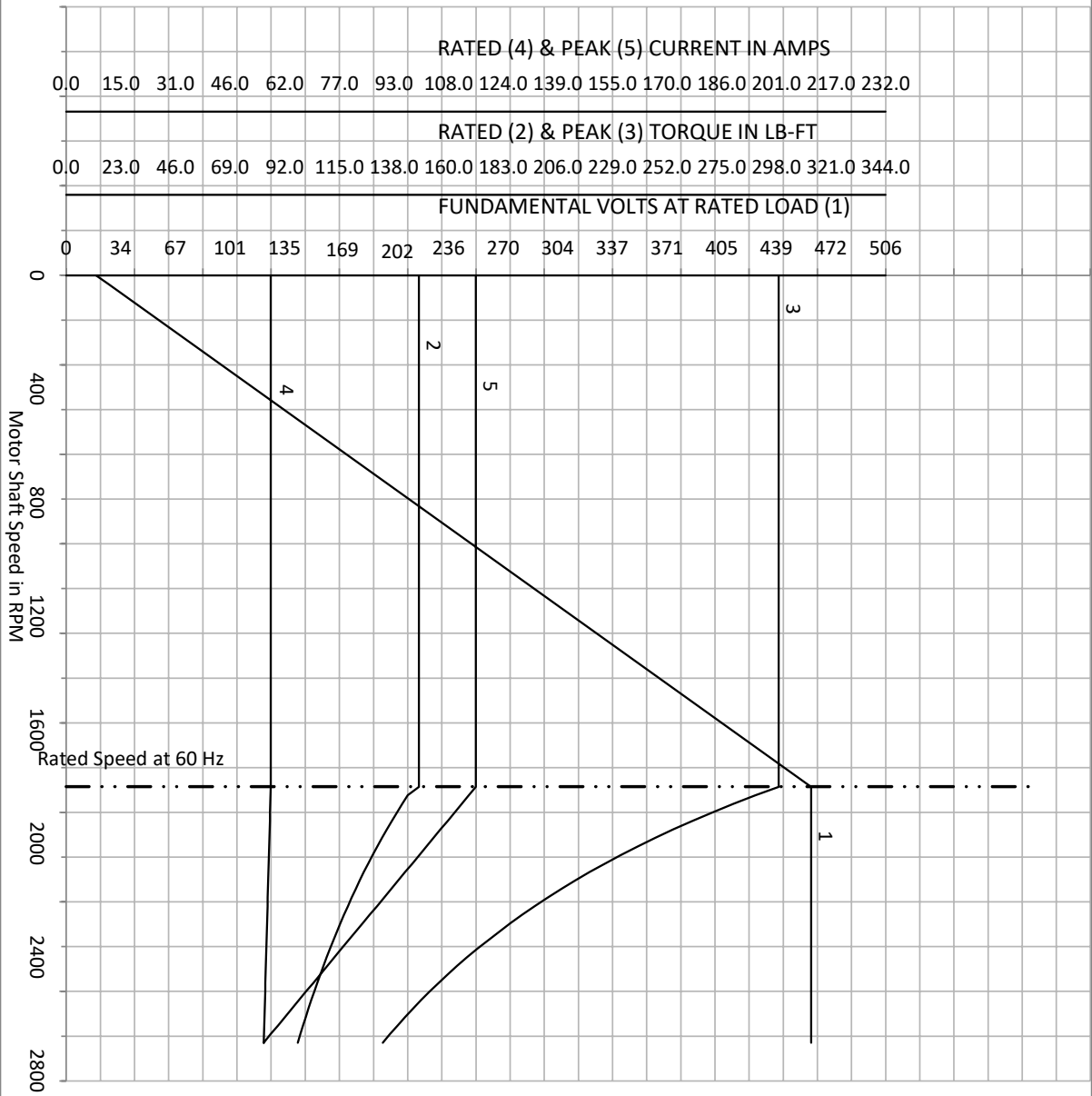
Blower Data	Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data  
Vector PWM Inverter Duty

<p><b>BALDOR • RELIANCE</b></p>	DR BY	BR	<p><b>A-C MOTOR PERFORMANCE CURVES</b></p>	<p><b>12WG279</b></p>
	CK BY	BR		
	APP BY	BR		
	DATE	11/28/2023		

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ. CT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	116/58	Base Volt	460	R1	0.057	X1	0.352
HP	50HP	NL AMPS	20.8	R2	0.050	X2	0.440
BASE SPEED	1800	Slips (Hz)	0.80	XM			11.900
PHASE/HZ	3/60	WK2 (lb-ft <sup>2</sup> )	9.59				

Vector PWM Inverter Duty  
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

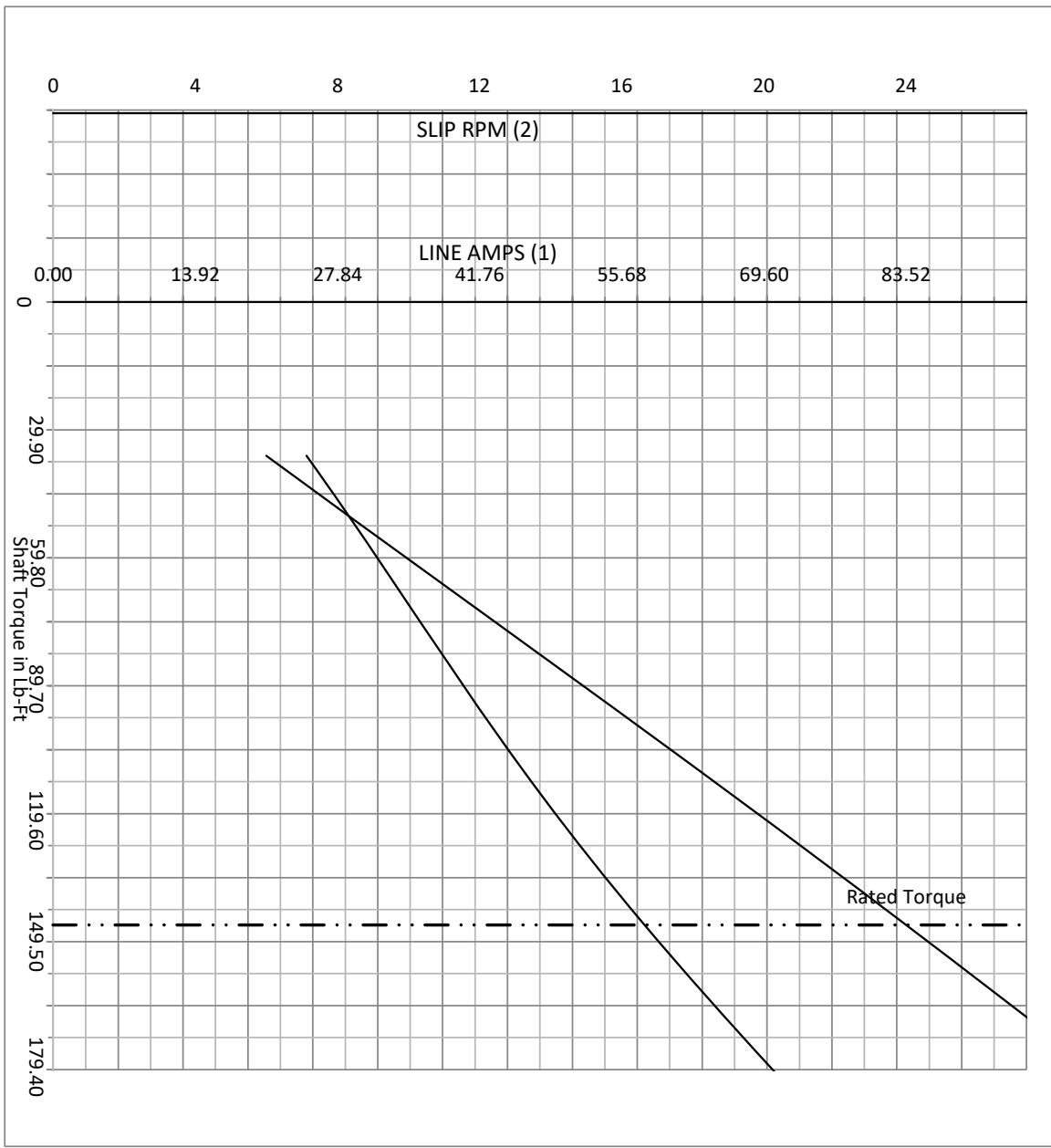
**BALDOR • RELIANCE**

DR BY BR  
 CK BY BR  
 APP BY BR  
 DATE 11/28/2023

**A-C MOTOR**  
**PERFORMANCE**  
**CURVES**  
**12WG2719**

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN. EQ. CT. OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	116/58	Base Volt	460	R1	0.057	X1	0.352
HP	50HP	NL AMPS	20.8	R2	0.050	X2	0.440
BASE SPEED	1800	Slips (Hz)	0.80	XM			11.900
PHASE/Hz	3/60	WK2 (lb-ft <sup>2</sup> )	9.59				

Vector PWM Inverter Duty  
Variable Speed AC Motor Curves



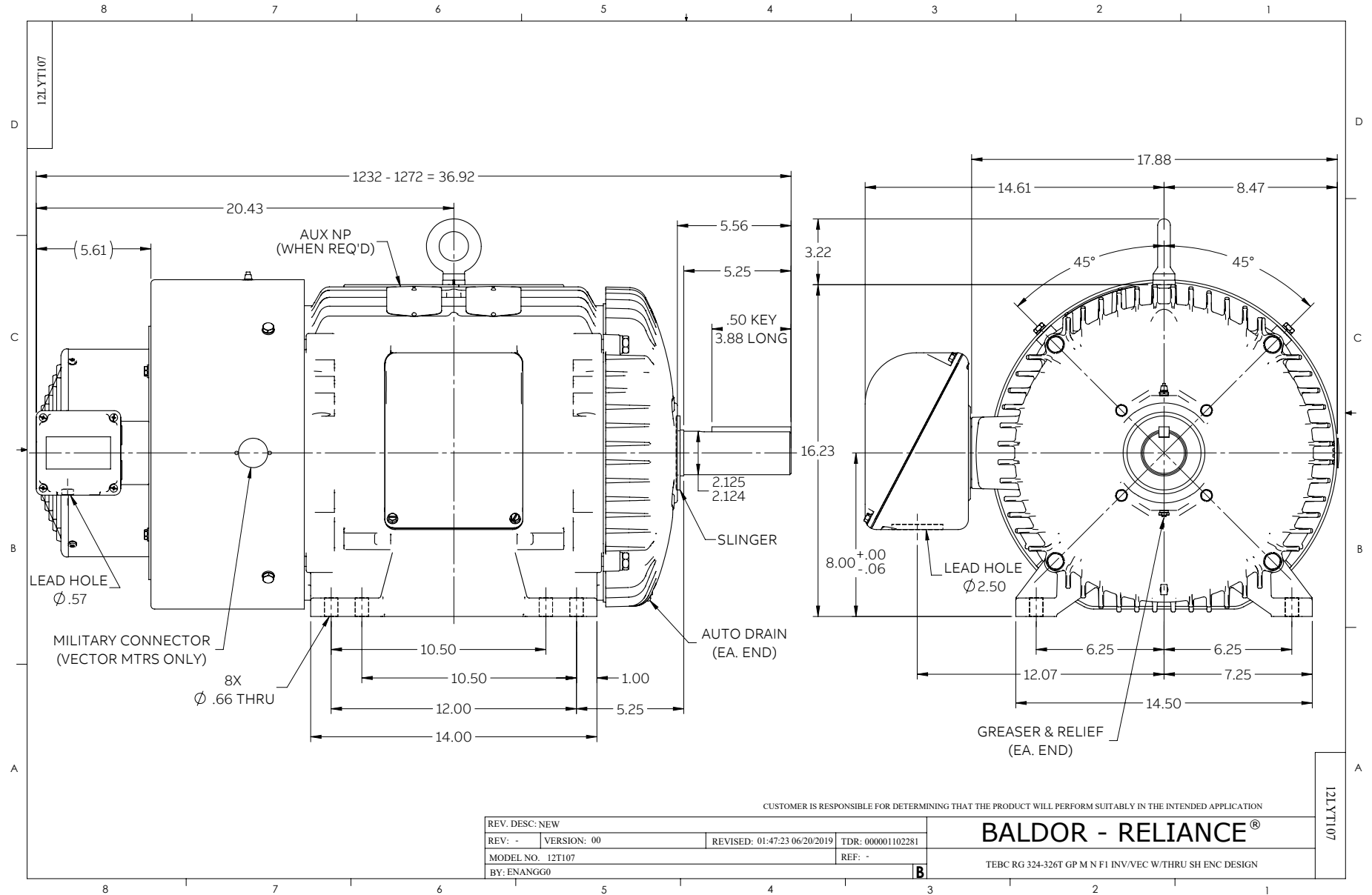
Calculated Data  
Data Valid For Nameplate Speed Range only

**BALDOR • RELIANCE**

DR BY BR  
CK BY BR  
APP BY BR  
DATE 11/28/2023

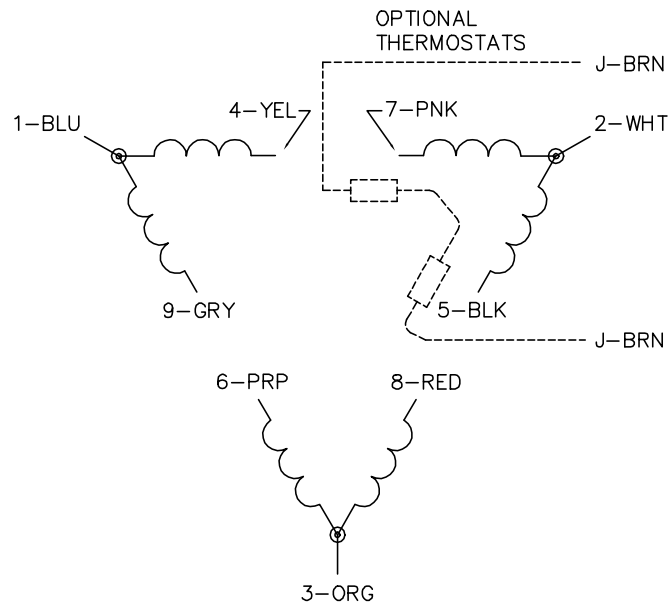
**A-C MOTOR PERFORMANCE CURVES**

**12WG2279**

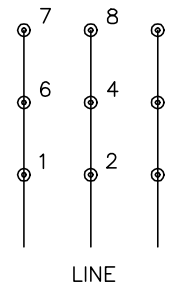




CD0180



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