

BALDOR® • RELIANCE 

Product Information Packet

M1228T

20/8.9HP, 1760/1160RPM, 3PH, 60HZ, 286T, 4046

Part Detail							
Revision:	L	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGX174	CD Diagram:	CD0013	Mfg Plant:	
Mech. Spec:	40D101	Layout:	40LYD101	Poles:	04/06	Created Date:	02-12-2010
Base:	RG	Eff. Date:	03-10-2021	Leads:	6#10		

Specs			
Catalog Number:	M1228T	Inverter Code:	Not Inverter
Enclosure:	OPSB	KVA Code:	H
Frame:	286T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	20.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	6 @ 10 AWG
	8.900 HP @ 60 HZ	Motor Lead Exit:	Ko Box
Synchronous Speed @ Frequency:	1200 RPM @ 60 HZ	Motor Lead Termination:	Flying Leads
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Type:	4046M
Agency Approvals:	CSA	Mounting Arrangement:	F1
	UR	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	24.000 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding
Design Code:	A	Shaft Rotation:	Reversible
Drip Cover:	No Drip Cover	Shaft Slinger Indicator:	No Slinger

Duty Rating:	CONT	Speed Code:	2S-2W-VT
Electrically Isolated Bearing:	Not Electrically Isolated	Motor Standards:	NEMA
Feedback Device:	NO FEEDBACK	Starting Method:	Direct on line
Front Face Code:	Standard	Thermal Device - Bearing:	None
Front Shaft Indicator:	None	Thermal Device - Winding:	None
Heater Indicator:	No Heater	Vibration Sensor Indicator:	No Vibration Sensor
Insulation Class:	F	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP1256L										
CAT.NO.	M1228T									
SPEC.	40D101X174									
HP	20/8.9									
VOLTS	460									
AMP	24/18									
RPM	1760/1160									
FRAME	286T				HZ	60			PH	3
SER.F.	1.15		CODE	H	DES	A		CLASS	F	
NEMA-NOM-EFF			PF							
RATING	40C AMB-CONT									
CC									USABLE AT 208V	
DE	6311			ODE	6309					
ENCL	OPSB		SN							

AC Induction Motor Performance Data

Record # 30415

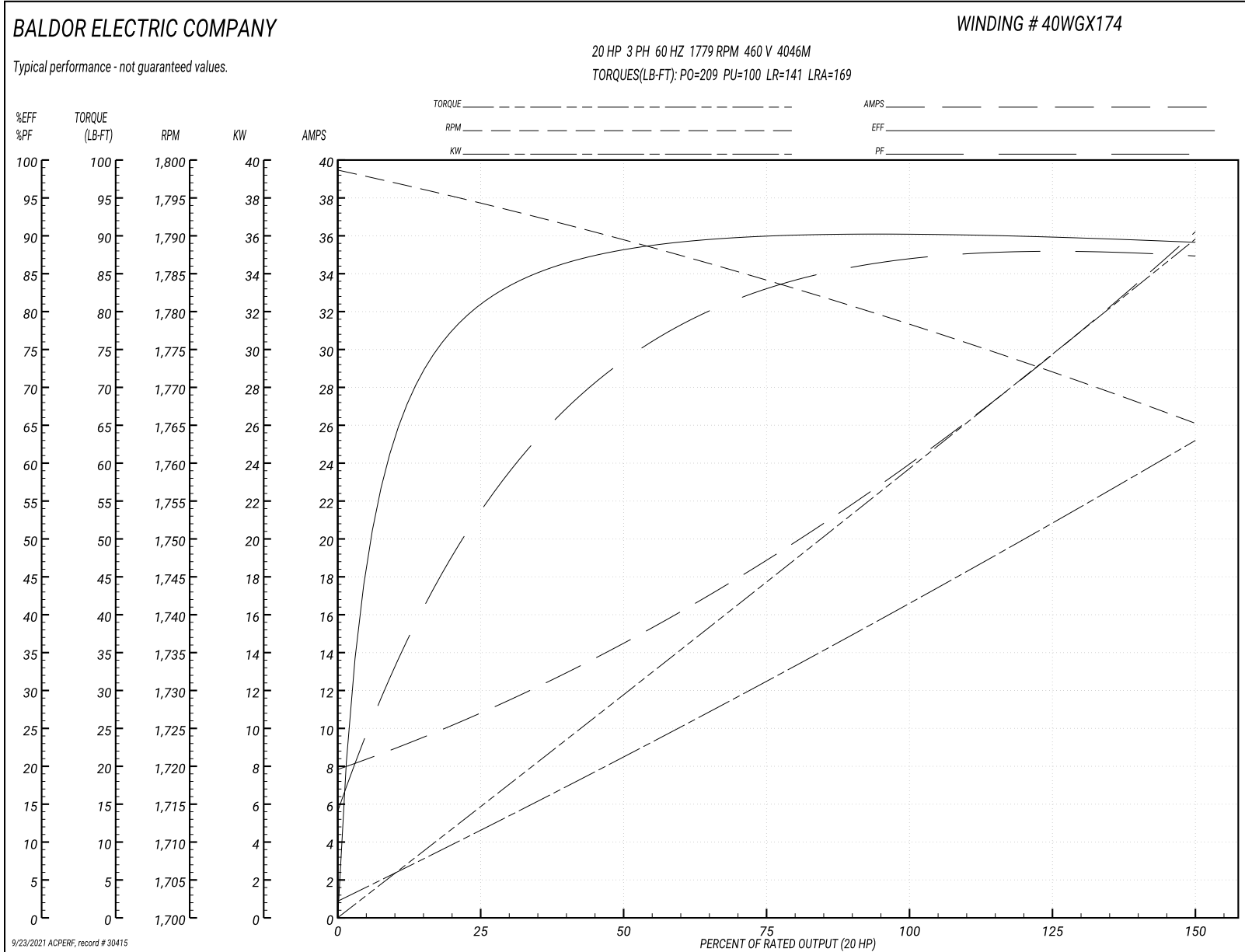
Typical performance - not guaranteed values

Winding: 40WGX174-R001		Type: 4046M	Enclosure: OPEN
Nameplate Data		460 V, 60 Hz: High Speed Connection	
Rated Output (HP)	20/8.9	Full Load Torque	59.4 LB-FT
Volts	460	Start Configuration	direct on line
Full Load Amps	24/18	Breakdown Torque	209 LB-FT
R.P.M.	1760/1160	Pull-up Torque	100 LB-FT
Hz	60 Phase	Locked-rotor Torque	141 LB-FT
NEMA Design Code	A KVA Code	Starting Current	169 A
Service Factor (S.F.)	1.15	No-load Current	8.13 A
NEMA Nom. Eff.	0 Power Factor	Line-line Res. @ 25°C	0.678 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	39°C
S.F. Amps		Temp. Rise @ S.F. Load	48°C

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	57	75	83	86	87	88	87
Efficiency	80.1	87.9	90	90.5	89.8	89.1	90.1
Speed	1794	1789	1784	1779	1772	1765	1775
Line amperes	10.5	14.3	19	24.1	30.2	35.9	27.8

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 30416

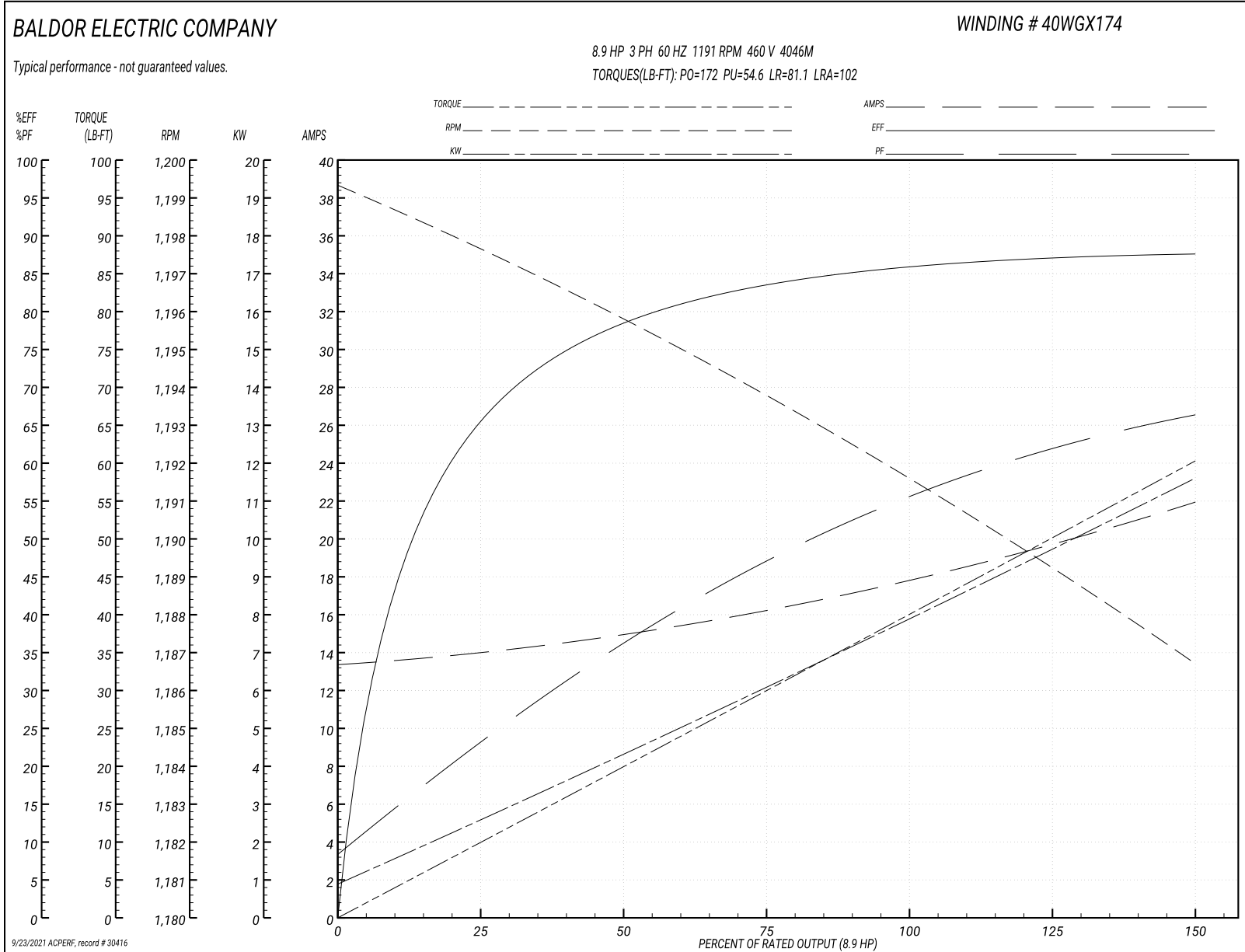
Typical performance - not guaranteed values

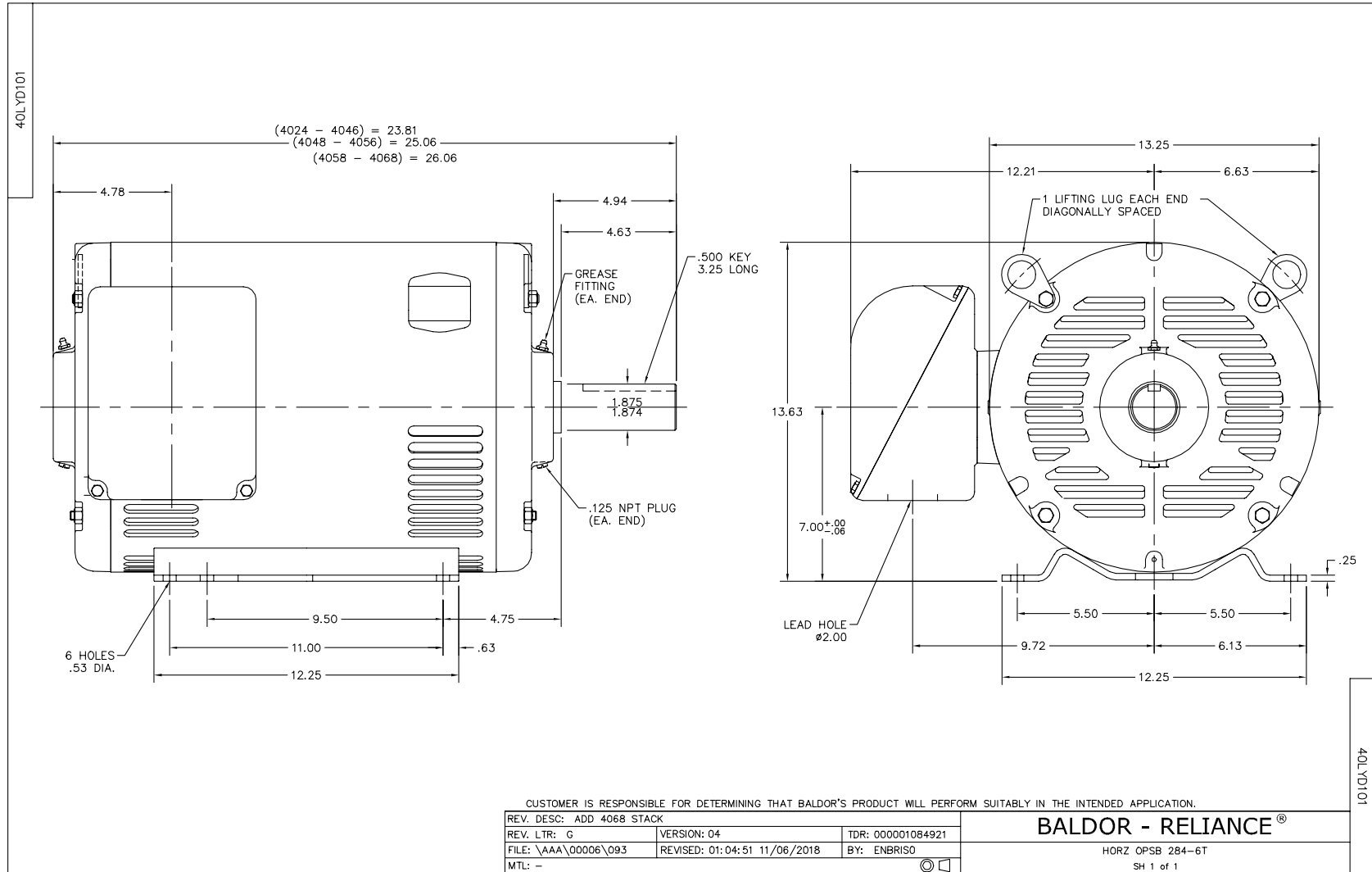
Winding: 40WGX174-R001		Type: 4046M		Enclosure: OPEN	
Nameplate Data			460 V, 60 Hz: Low Speed Connection		
Rated Output (HP)	20/8.9	Full Load Torque	39.8 LB-FT		
Volts	460	Start Configuration	direct on line		
Full Load Amps	24/18	Breakdown Torque	172 LB-FT		
R.P.M.	1760/1160	Pull-up Torque	54.6 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	81.1 LB-FT	
NEMA Design Code	A KVA Code	H	Starting Current	102 A	
Service Factor (S.F.)		1.15	No-load Current	13.4 A	
NEMA Nom. Eff.	0 Power Factor	0	Line-line Res. @ 25°C	0.959 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load	50°C	
S.F. Amps			Temp. Rise @ S.F. Load	55°C	

Load Characteristics 460 V, 60 Hz, 8.9 HP

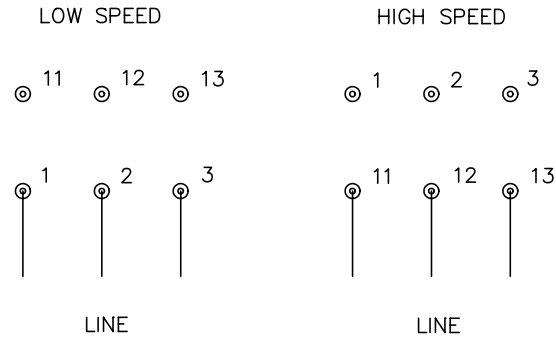
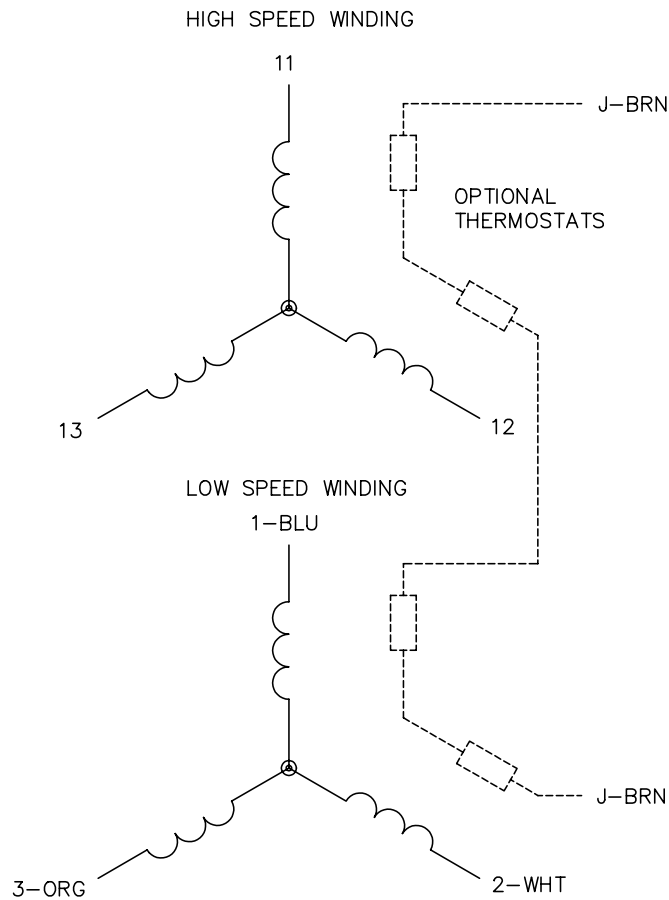
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	23	37	47	55	62	66	59
Efficiency	66.8	78.8	84	85.2	87	87.8	86.3
Speed	1198	1196	1194	1191	1189	1187	1190
Line amperes	14	14.9	16.2	17.9	19.8	21.9	19

Performance Graph at 460V, 60Hz, 8.9HP Typical performance - Not guaranteed values





CD0013



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 VARY.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 01/22/99 8:50	TDR: 0171435
Ω10003		FILE: AAA00005143	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, 2-SPEED 2-WINDING

CD0013