

BALDOR® • RELIANCE 

Product Information Packet

EM3704T

3HP,1160RPM,3PH,60HZ,213T,3738M,TEFC,F1

Part Detail							
Revision:	S	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGS519	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37H244	Layout:	37LYH244	Poles:	06	Created Date:	04-11-2008
Base:	RG	Eff. Date:	08-15-2022	Leads:	9#14		

Specs			
Catalog Number:	EM3704T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	213T	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	L
Motor Letter Type:	Three Phase	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	3.000 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1200 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3738M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	NEMA_PREMIUM	Power Factor:	68
	UR	Product Family:	General Purpose
	NEMA PREMIUM	Pulley End Bearing Type:	Ball
	CSA EEV	Pulley Face Code:	Standard
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	Rigid	RoHS Status:	ROHS COMPLIANT

Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	9.200 A @ 230.0 V	Shaft Rotation:	Reversible
	9.600 A @ 208.0 V	Shaft Slinger Indicator:	No Slinger
	4.600 A @ 460.0 V	Speed Code:	Single Speed
Design Code:	B	Motor Standards:	NEMA
Drip Cover:	No Drip Cover	Starting Method:	Direct on line
Duty Rating:	CONT	Thermal Device - Bearing:	None
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Winding:	None
Feedback Device:	NO FEEDBACK	Vibration Sensor Indicator:	No Vibration Sensor
Front Face Code:	Standard	Winding Thermal 1:	None
Front Shaft Indicator:	None	Winding Thermal 2:	None

Nameplate NP3441LUA	
CAT.NO.	EM3704T
SPEC	37H244S519G1
HP	3
VOLTS	230/460
AMPS	9.2/4.6
RPM	1160
FRAME	213T
	HZ 60
	PH 3
SF	1.15
	CODE L
	DES B
	CLASS F
NEMA NOM. EFF	89.5
	PF 68
RATING	40C AMB-CONT
CC	010A
	USABLE AT 208V N/A
ENCL	TEFC
	SER
DE	6307
	ODE 6206
VPWM INVERTER READY	
CT6-60H(10:1)VT3-60H(20:1)	
	50Hz 3HP 190/380V 10.6/5.3A
	SF1.0

AC Induction Motor Performance Data

Record # 53388

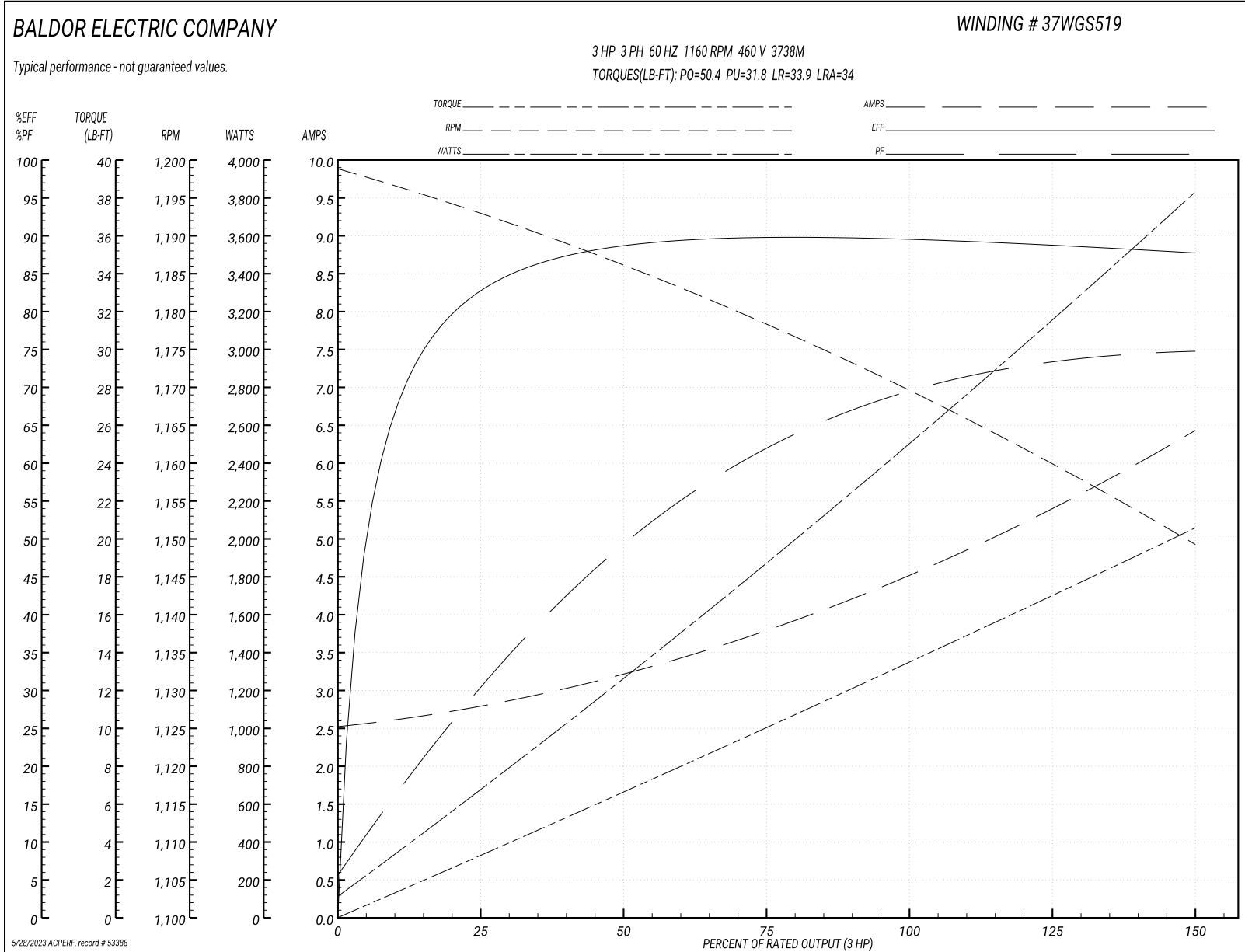
Typical performance - not guaranteed values

Winding: 37WGS519-R032		Type: 3738M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	3	Full Load Torque	13.4 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	9.2/4.6	Breakdown Torque	50.4 LB-FT		
R.P.M.	1160	Pull-up Torque	31.8 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	33.9 LB-FT	
NEMA Design Code	B KVA Code	L	Starting Current	34 A	
Service Factor (S.F.)	1.15		No-load Current	2.56 A	
NEMA Nom. Eff.	89.5	Power Factor	68	Line-line Res. @ 25°C	2.67 Ω
Rating - Duty	40C	AMB-CONT		Temp. Rise @ Rated Load	38°C
S.F. Amps				Temp. Rise @ S.F. Load	45°C
				Locked-rotor Power Factor	22.9
				Rotor inertia	0.945 LB-FT ²

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	50	62	69	73	75	70
Efficiency	82.1	88.6	89.5	89.8	89.1	87.6	89.1
Speed	1193	1186	1178	1170	1160	1149	1166
Line amperes	2.74	3.19	3.82	4.53	5.44	6.41	5.14

Performance Graph at 460V, 60Hz, 3.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 60478

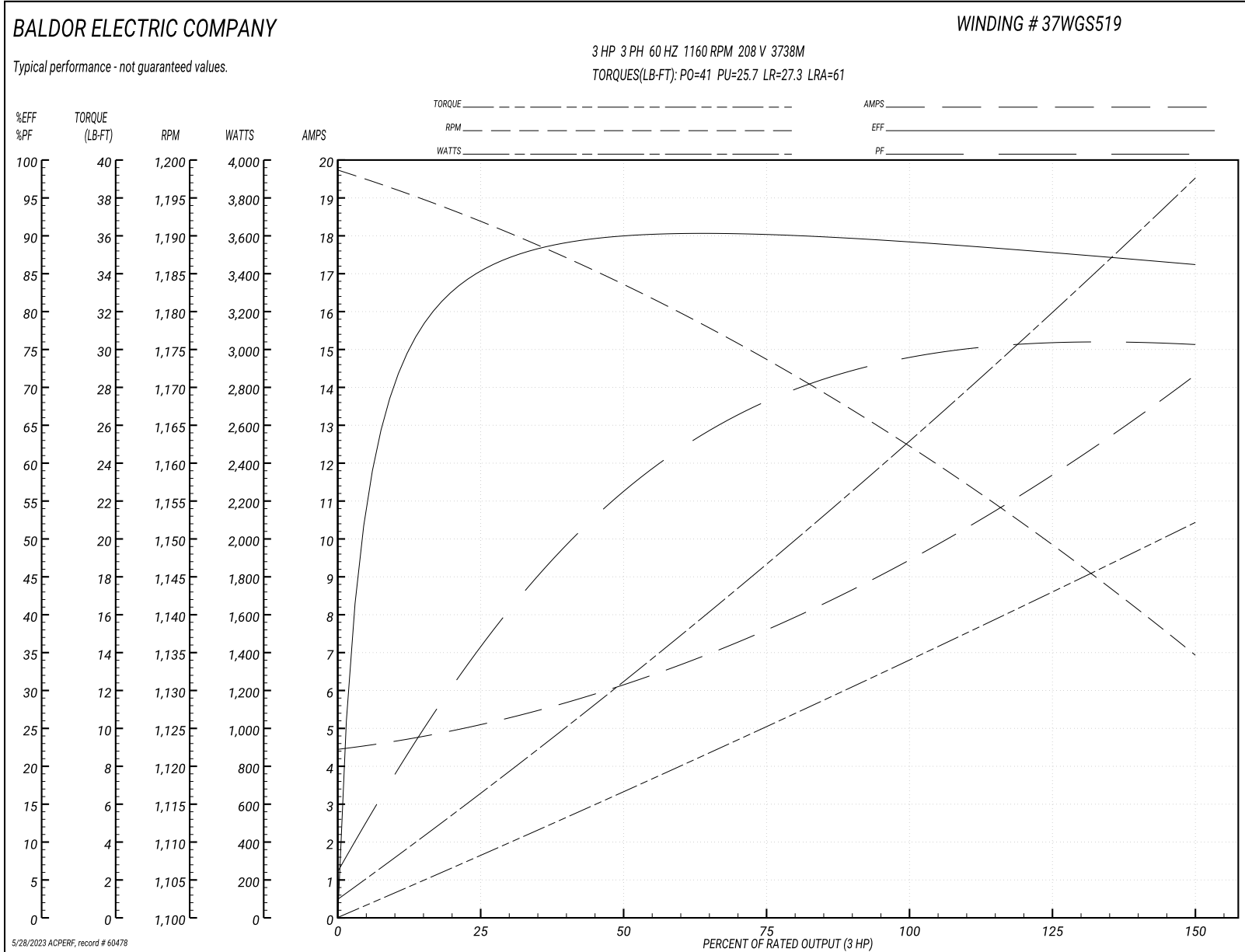
Typical performance - not guaranteed values

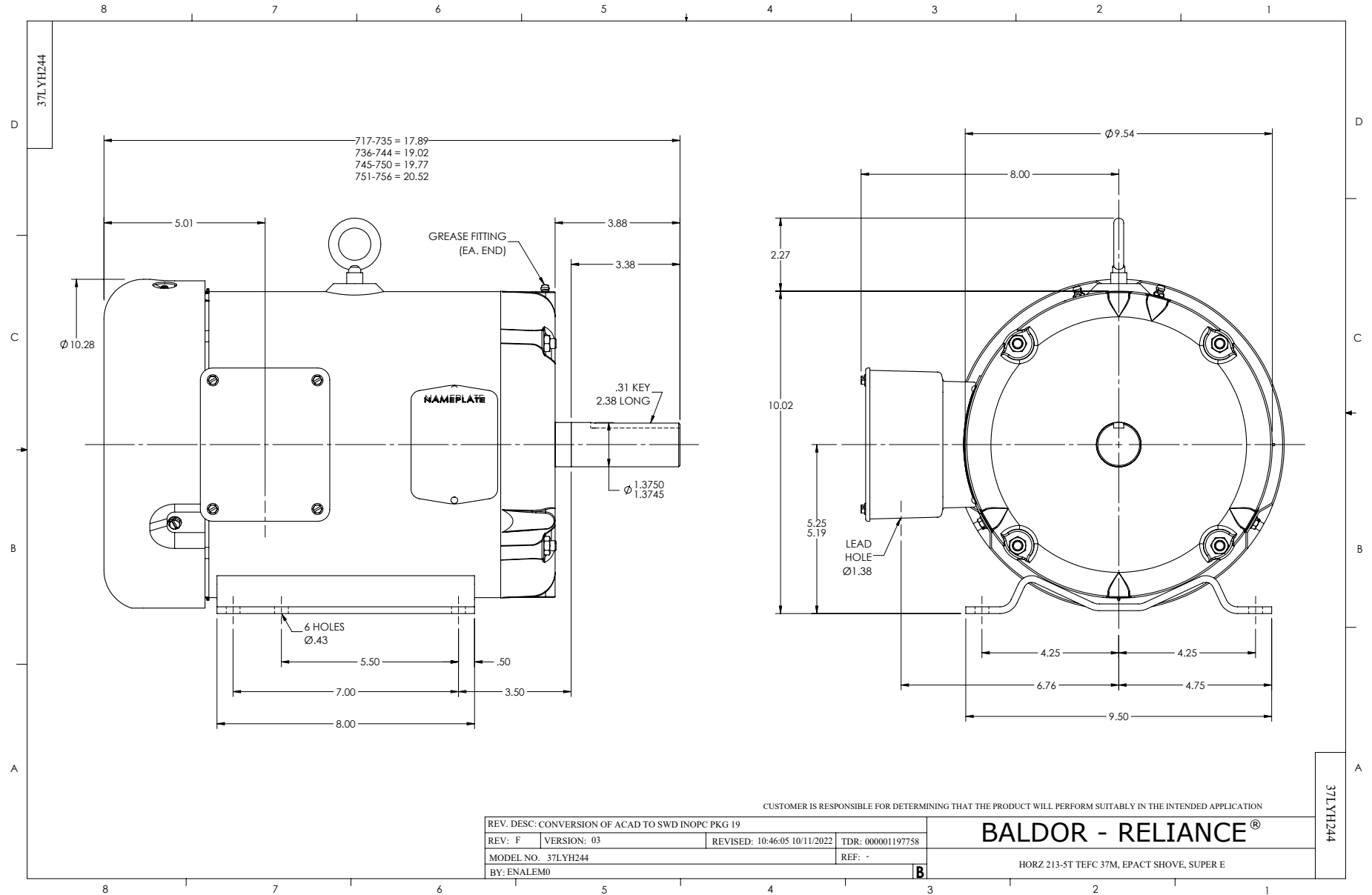
Winding: 37WGS519-R032		Type: 3738M		Enclosure: TEFC	
Nameplate Data			208 V, 60 Hz: Low Voltage Connection		
Rated Output (HP)		3	Full Load Torque		13.5 LB-FT
Volts		208-230/460	Start Configuration		direct on line
Full Load Amps		9.5-9.2/4.6	Breakdown Torque		41 LB-FT
R.P.M.		1160	Pull-up Torque		25.7 LB-FT
Hz	60 Phase	3	Locked-rotor Torque		27.3 LB-FT
NEMA Design Code	B KVA Code	L	Starting Current		61 A
Service Factor (S.F.)		1.15	No-load Current		4.52 A
NEMA Nom. Eff.	89.5 Power Factor	68	Line-line Res. @ 25°C		0.668 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		39°C
S.F. Amps			Temp. Rise @ S.F. Load		49°C
			Locked-rotor Power Factor		22.9
			Rotor inertia		0.945 LB-FT ²

Load Characteristics 208 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	36	57	68	73	76	76	75
Efficiency	84.3	89.5	90.1	89.6	88	86.1	88.6
Speed	1192	1183	1173	1163	1150	1134	1155
Line amperes	4.98	6.11	7.69	9.46	11.7	14.3	10.8

Performance Graph at 208V, 60Hz, 3.0HP Typical performance - Not guaranteed values





CD0005



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
90000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005