

BALDOR® • RELIANCE 

Product Information Packet

EM4106T-8

20HP,3510RPM,3PH,60HZ,256T,0932M,TEFC,F1

Part Detail							
Revision:	S	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	09WGZ583	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	09P11	Layout:	09LYP011	Poles:	02	Created Date:	04-23-2010
Base:	RG	Eff. Date:	06-20-2018	Leads:	3#8		

Specs			
Catalog Number:	EM4106T-8	Inverter Code:	Inverter Ready
Enclosure:	TEFC	KVA Code:	G
Frame:	256T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	20.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 8 AWG
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	200.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	0932M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	90
	CSA EEV	Product Family:	General Purpose
	UR	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	52.000 A @ 200.0 V	Shaft Rotation:	Reversible

Design Code:	B	Shaft Slinger Indicator:	Shaft Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	NONE (OLD)
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
Insulation Class:	F	Winding Thermal 2:	None

Nameplate NP3441L										
CAT.NO.	EM4106T-8									
SPEC.	09P011Z583									
HP	20									
VOLTS	200									
AMP	52									
RPM	3510									
FRAME	256T					HZ	60		PH	3
SER.F.	1.15			CODE	G	DES	B		CL	F
NEMA-NOM-EFF	91			PF	90					
RATING	40C AMB-CONT									
CC	010A					USABLE AT 208V				
DE	6309					ODE	6208			
ENCL	TEFC			SN						
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1)										

Parts List		
Part Number	Description	Quantity
SA193939	SA 09P011Z583	1.000 EA
RA181533	RA 09P011Z583	1.000 EA
37FN3002C02	EXFN, PLASTIC, 6.00 OD, 1.503 ID	1.000 EA
HW1002A63	0ASHER, 5/8 HI-COLLAR SPRLCKWASHER	1.000 EA
09CB3002SP	CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 EA
10XN2520K12	1/4-20 X.75 GRD 5	2.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
10XN2520K28	1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
09EP1101A136	PU ENDPLATE, MACH	1.000 EA
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
WD1000B16	T&B CX70TN TERMINAL	1.000 EA
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 EA
09EP1100A194	ENDPLATE, MACH	1.000 EA
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HA3113A02	THRUBOLT 3/8-16 X 16.750	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
09FH4000SP	309 FH	1.000 EA
HA2081A05	SPACER TUBE, 309 FAN HSG, 2.00 LONG	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
XY3816A12	3/8-16 FINISHED NUT	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 EA
09GS1013SP	09 GS FOR 09CB3501 LID - LEXIDE	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A05	1669B ALEM/UNIV860 GR FTG X	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.080 LB
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.050 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA

09PA1000	PACKAGING GROUP COMBINED PRINT	1.000 EA
FE-0000013	ZRTG FE ASSEMBLY	1.000 EA
PE-0000003	ZRTG PE ASSEMBLY	1.000 EA

Accessories		
Part Number	Description	Multiplier
09-1309	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 30944 - Typical performance - not guaranteed values

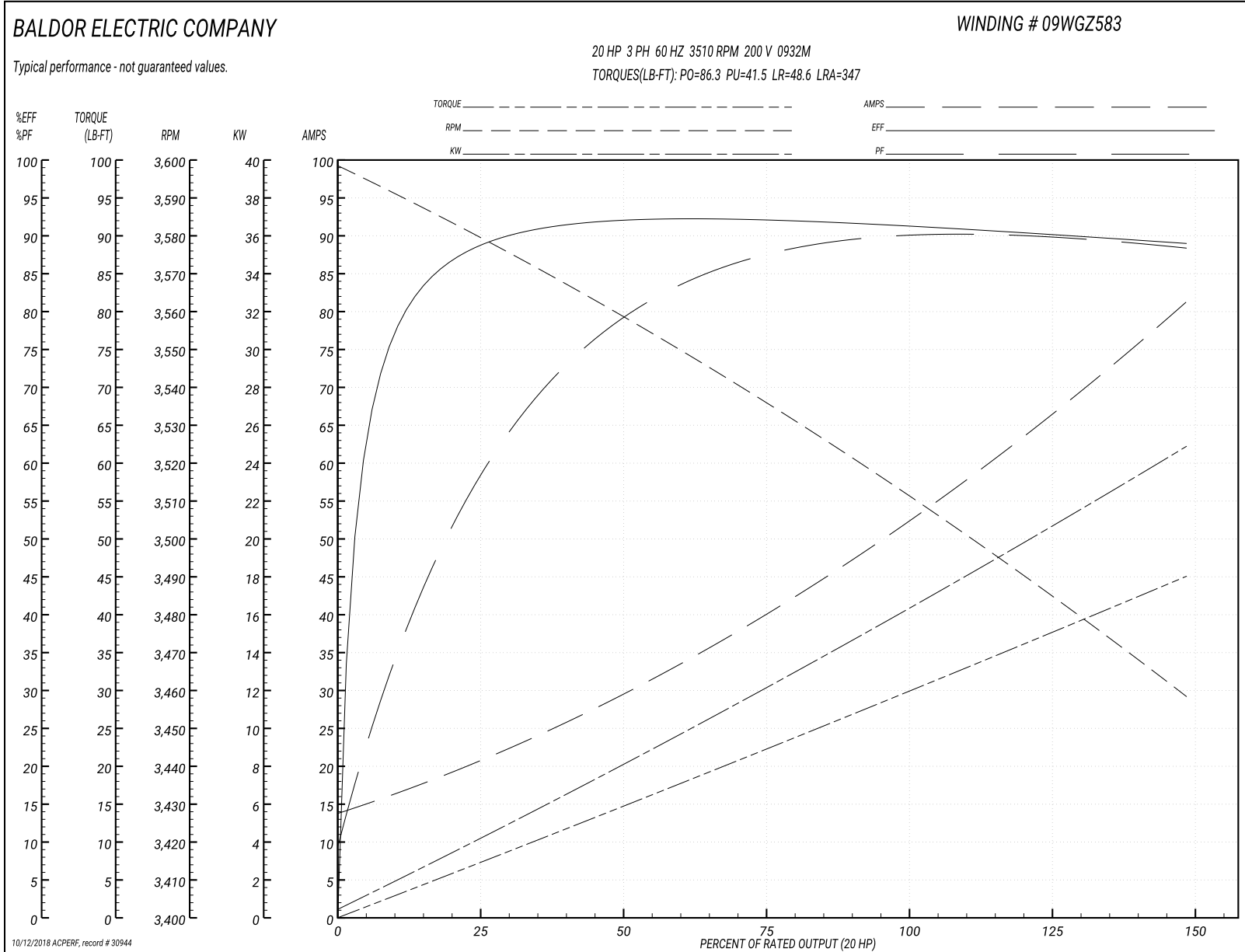
Winding: 09WGZ583-R001	Type: 0932M	Enclosure: TEFC
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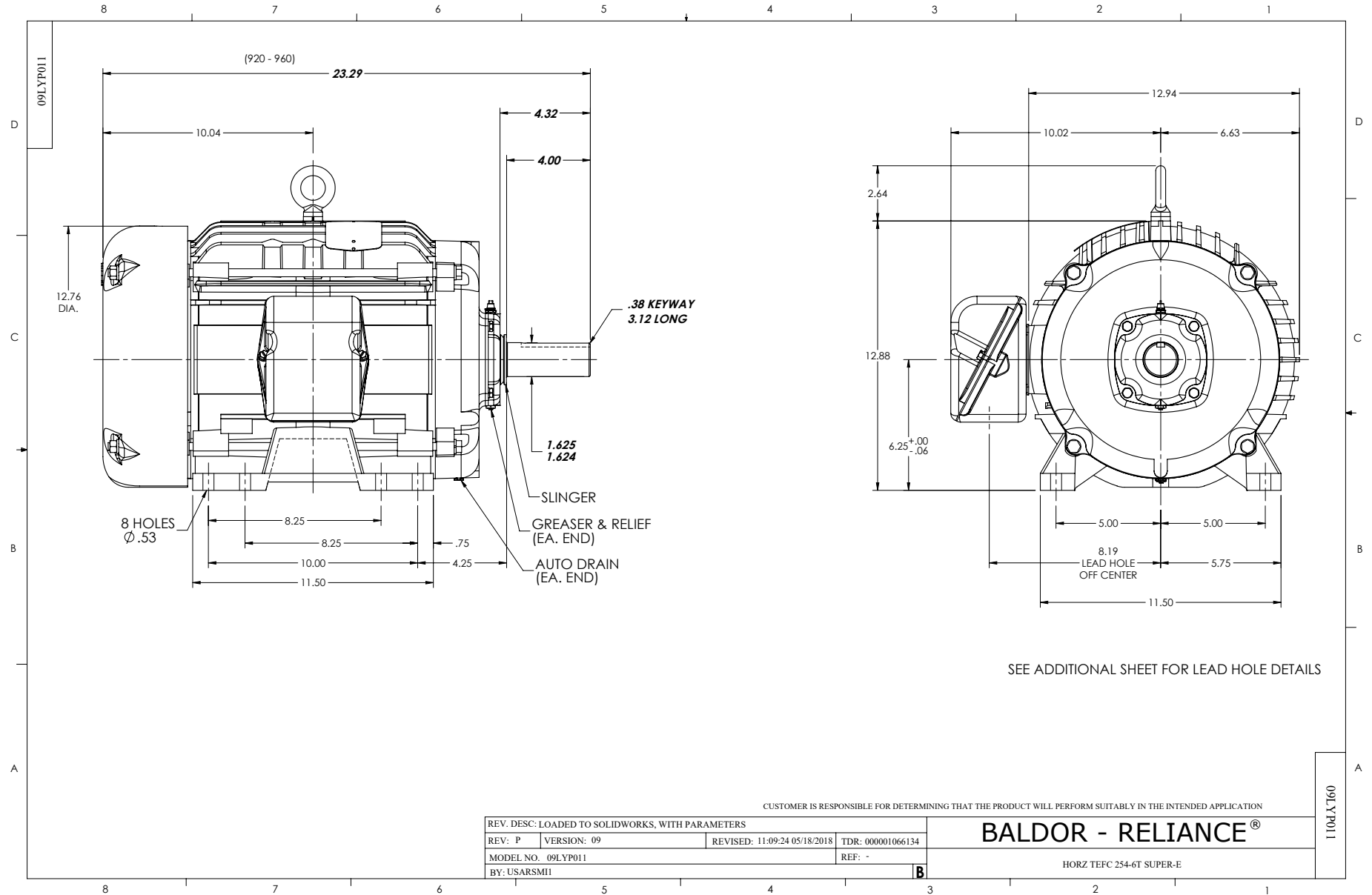
Nameplate Data				200 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	20			Full Load Torque	29.9 LB-FT
Volts	200			Start Configuration	direct on line
Full Load Amps	52			Breakdown Torque	86.3 LB-FT
R.P.M.	3510			Pull-up Torque	41.5 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	48.6 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	347 A
Service Factor (S.F.)	1.15			No-load Current	14.1 A
NEMA Nom. Eff.	91	Power Factor	90	Line-line Res. @ 25°C	0.108 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	67°C
S.F. Amps				Temp. Rise @ S.F. Load	85°C
				Locked-rotor Power Factor	30
				Rotor inertia	0.817 LB-FT ²

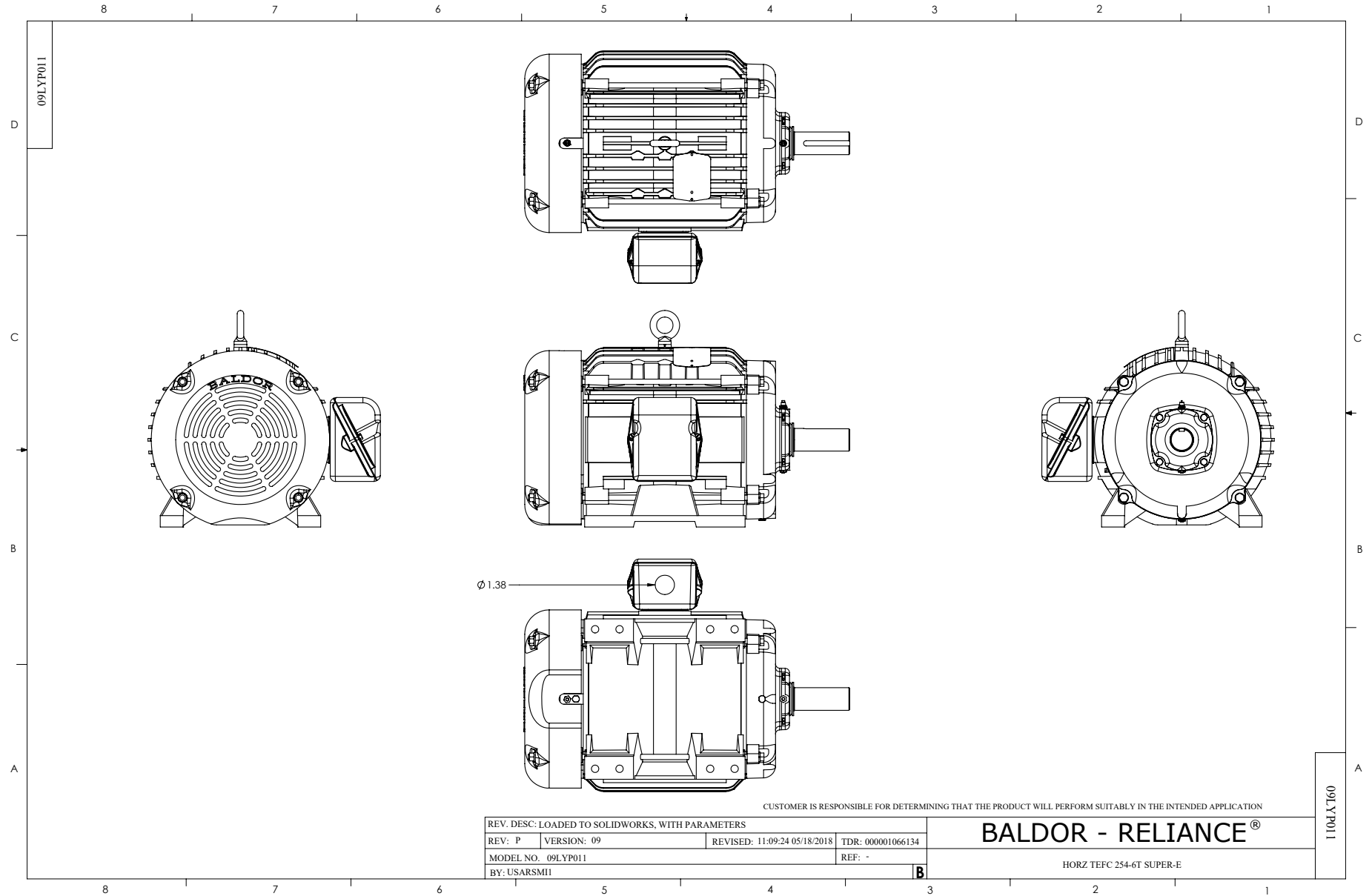
Load Characteristics 200 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	60	80	87	90	90	89	90
Efficiency	88.1	92.1	92.1	91.4	90.1	89	90.6
Speed	3579	3557	3536	3512	3486	3458	3496
Line amperes	20.4	29.5	40.7	52.3	66.2	81.1	60.6

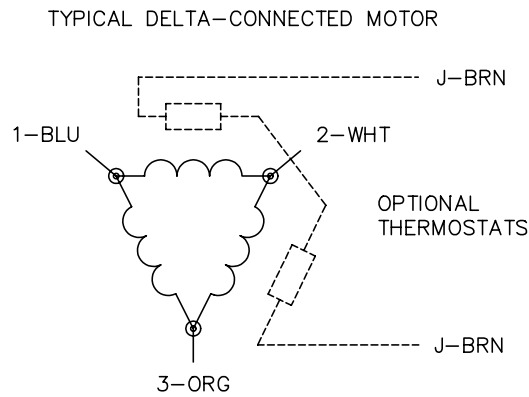
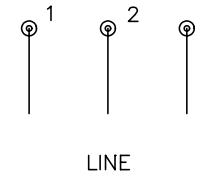
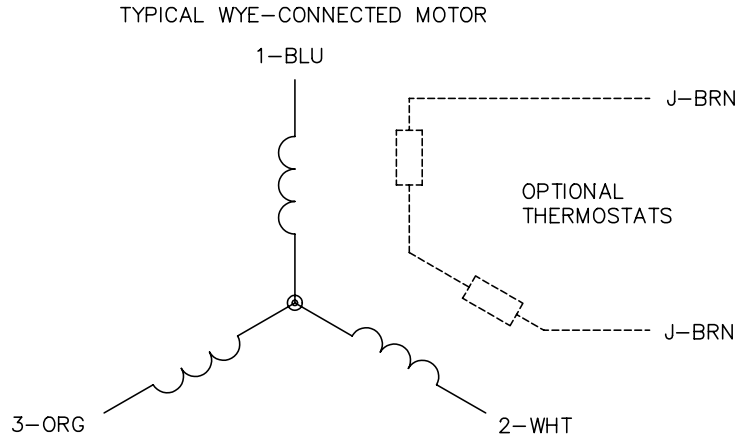
Performance Graph at 200V, 60Hz, 20.0HP Typical performance - Not guaranteed values







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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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 01/21/99 4:02	TDR: 0171435
9000D		FILE: AAA00005141	MDL: -
		MTL: -	

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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