

**BALDOR® • RELIANCE** 

**Product Information Packet**

**ECP83587T-5**

**2HP,1755RPM,3PH,60HZ,145T,0535M,TEFC,F1**

Part Detail							
Revision:	AJ	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	05WGX086	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	05E811	Layout:	05LYE811	Poles:	04	Created Date:	12-02-2010
Base:	RG	Eff. Date:	02-07-2022	Leads:	3#18		

Specs			
Catalog Number:	ECP83587T-5	Inverter Code:	Inverter Duty
Enclosure:	TEFC	KVA Code:	L
Frame:	145T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	2.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 18 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	CLI GP A,B,C,D	Motor Type:	0534M
XP Division:	Division II	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	76
	CSA EEV	Product Family:	Chem Process S/P 32-8 IEEE 841
	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)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End
Constant Torque Speed Range:	1.5	Shaft Ground Indicator:	No Shaft Grounding

<b>Current @ Voltage:</b>	2.300 A @ 575.0 V	<b>Shaft Rotation:</b>	Reversible
<b>Design Code:</b>	B	<b>Shaft Slinger Indicator:</b>	Shaft Slinger
<b>Drip Cover:</b>	No Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Direct on line
<b>Enclosure Modification:</b>	841	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None
<b>Insulation Class:</b>	F	<b>XP Temp Code:</b>	T4

<b>Nameplate NP3235E</b>											
<b>CAT.NO.</b>	ECP83587T-5										
<b>SPEC.</b>	05E811X086G1										
<b>HP</b>	2	TE						<b>IP</b>	56		
<b>VOLTS</b>	575										
<b>AMPS</b>	2.3										
<b>R.P.M.</b>	1755										
<b>FRAME</b>	145T						<b>HZ</b>	60			
<b>SER.F.</b>	1.15			<b>CODE</b>	L		<b>DES.</b>	B			
<b>RATING</b>	40C AMB-CONT										
<b>SN</b>											
<b>DE</b>	6205				<b>ODE</b>	6205					
<b>NEMA NOM. EFF.</b>	86.5				<b>P.F.</b>	76					
<b>GUAR. MIN. EFF.</b>	84				<b>CC</b>	010A					
<b>T. CODE</b>	T4				<b>TEMP=</b>	135					
							<b>PH</b>	3		<b>CLASS</b>	F

Nameplate NP3186E			
SPEC.	05E811X086G1		
ABMA DE BRG	25BC02X30X		
ABMA ODE BRG	25BC02X30X		
GREASE	POLYREX EM		
MOTOR WEIGHT	77	ROTOR BARS	28
MAX. R.P.M.	2700	MAX. KVAR	.67
		STATOR BARS	36
INV. TYPE	PWM		
T=	135	TO	90
CHP	60	TO	60
CT	1.5	TO	60
VT	0-		
HTR-VOLTS	N/A	HTR-AMPS	N/A
HTR-WATTS	N/A		
		MAX. SPACE HEATER TEMP.	N/A

Parts List		
Part Number	Description	Quantity
SA213119	SA 05E811X086G1	1.000 EA
RA200345	RA 05E811X086G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
HW3201A05	3/8-16 EYEBOLT	1.000 EA
06CB1001A01G	CONDUIT BOX, MACH GRAY	1.000 EA
RM1016	LEAD SEPARATOR GASKET - 305/306 C.P.MOTO	1.000 EA
51XW2520A12	SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 EA
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	2.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
05EP1100A02G	FREP TEFC 205,GRSR,RLF,DRAIN FITTING,INP	1.000 EA
HW4601B22	INPRO SEAL, 205 BRG, MINI66	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4010A01	T-DRAIN PLUG,416 S.S.,W/ 1/4-28 THD & .0	1.000 EA
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 EA
05EP1100A01G	PUEP ENCL 205,BRG RET,GRSR,RLF,DRAIN FIT	1.000 EA
HW4601B22	INPRO SEAL, 205 BRG, MINI66	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HA4010A01	T-DRAIN PLUG,416 S.S.,W/ 1/4-28 THD & .0	1.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
HA3100A37	THRUBOLT 10-32 X 8.500	4.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
35FH1000A19G	35FH1000A19 W/GRAY FLUIDIZ	1.000 EA
10XN2520A16	1/4-20 X 1 HEX HEAD CAP SCR, ZINC PLATED	3.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	3.000 EA
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.010 EA
WD4100A03	DE-750 HEYCO PLUG 62MP0750 MICRO PLASTIC	1.000 EA
06CB1503A01G	LIPPED CONDUIT BOX LID, MACH GRAY EPOXY	1.000 EA
06GS1009	GASKET, KOBX LID, 1/8" THICK BLACK NEOPR	1.000 EA
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 QT
MJ1000A73	INPRO P-80 ASSEMBLY LUB./ 1 QT. CONTAIN	0.001 QT
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LT0019A00	MOTOR NO-LOAD PERFORMANCE DATA SHEET	1.000 EA
WD1000D21	TRM,T&B #B71M,RING,18-14,.25,NON-INSL	3.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA

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MG1025N19	WILKOFAST, 778.50, RELIANCE BLUE-GREEN	0.022 GA
LB1119N	WARNING LABEL	1.000 EA
LB1449	DIV-2/NEC WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3235E	SS IEEE841 DIV-2 UL CSA-C US EEV PREM	1.000 EA
NP3186E	SS IEEE841 INV AUX DATA INFORMATION	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA



**AC Induction Motor Performance Data**

Record # 92323

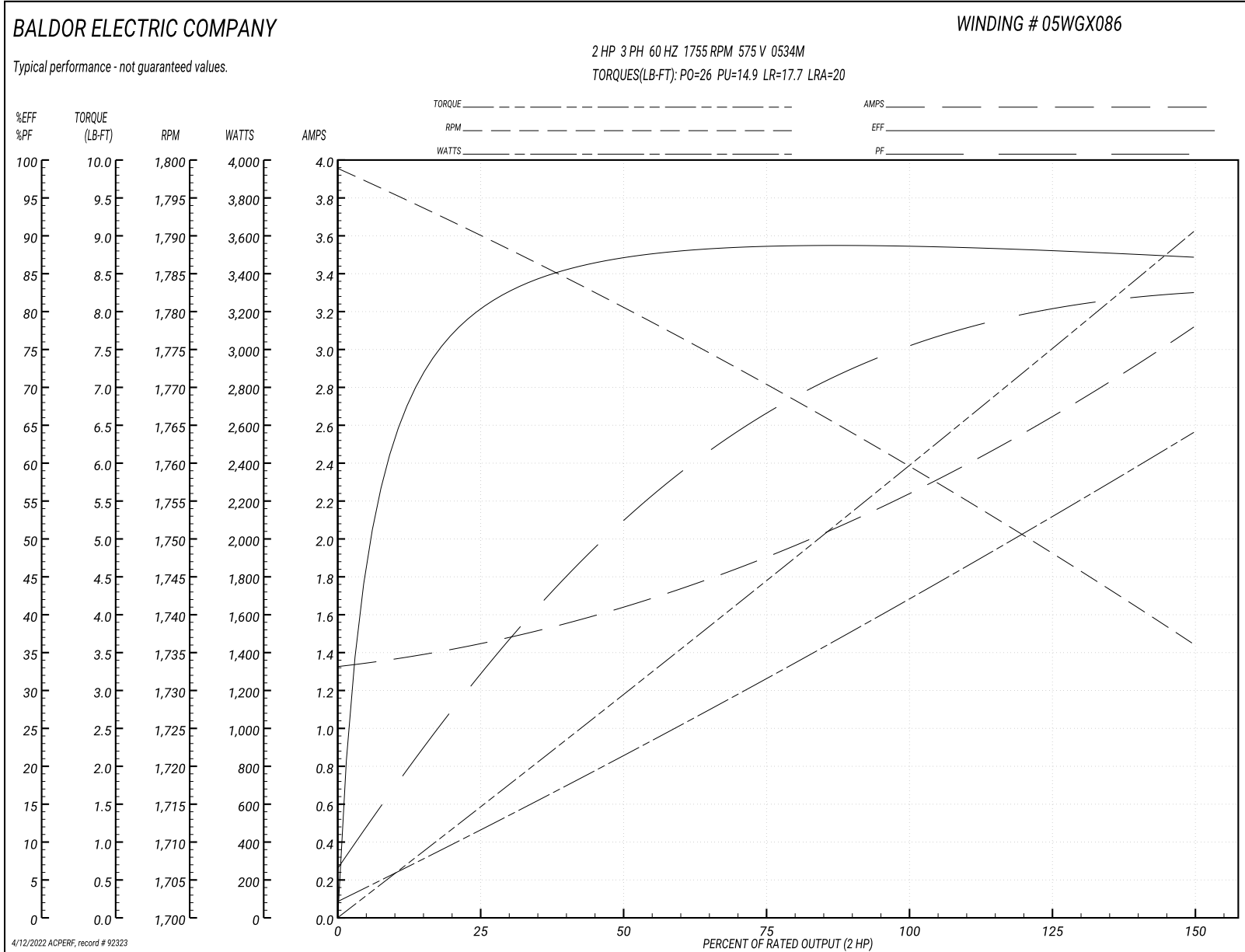
Typical performance - not guaranteed values

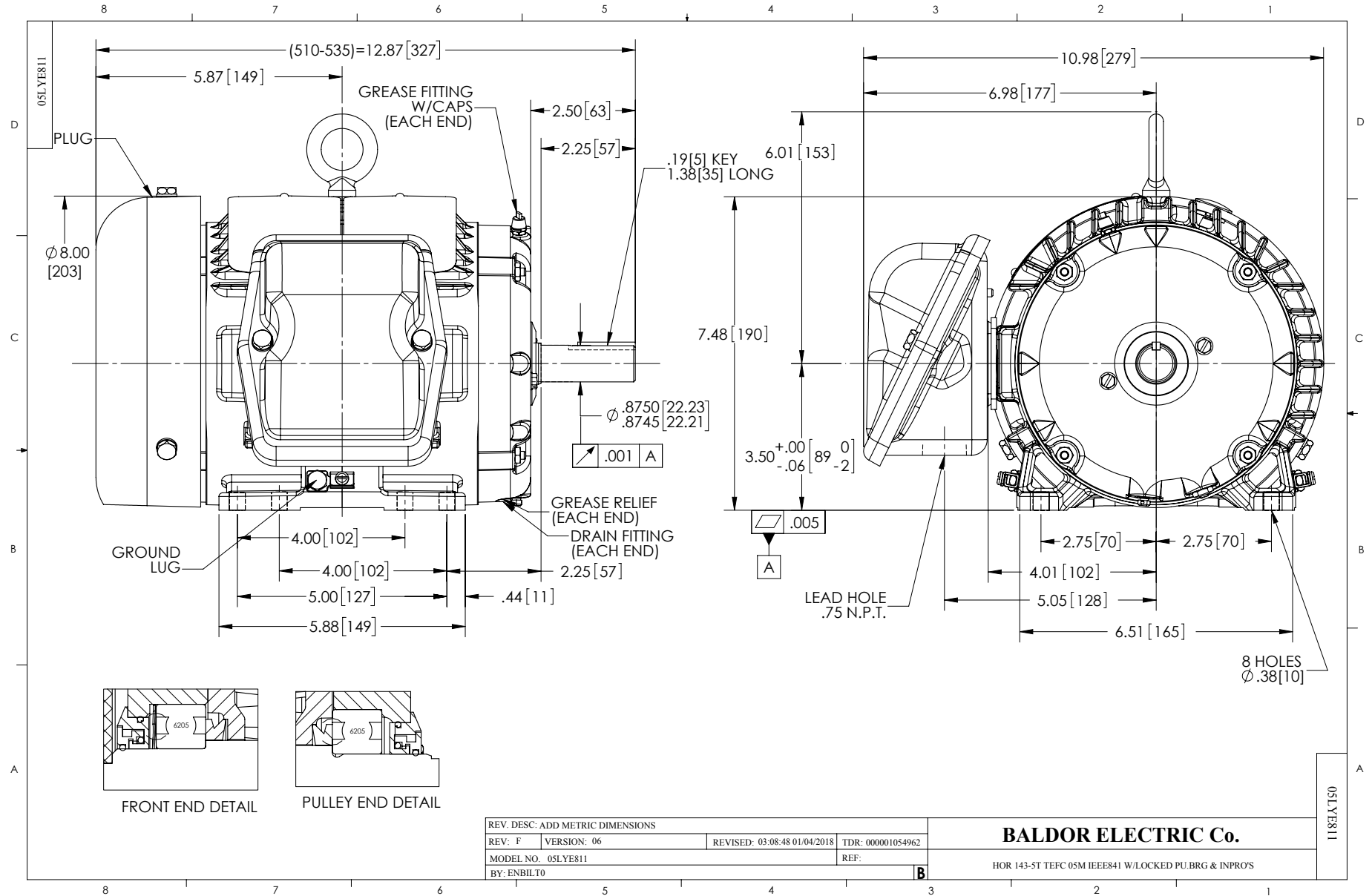
Winding: 05WGX086-R013		Type: 0534M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>	
Rated Output (HP)	2	Full Load Torque	5.99 LB-FT	
Volts	575	Start Configuration	direct on line	
Full Load Amps	2.3	Breakdown Torque	26 LB-FT	
R.P.M.	1755	Pull-up Torque	14.9 LB-FT	
Hz	60 Phase	Locked-rotor Torque	17.7 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	20 A	
Service Factor (S.F.)	1.15	No-load Current	1.35 A	
NEMA Nom. Eff.	86.5 Power Factor	Line-line Res. @ 25°C	9.84 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	39°C	
S.F. Amps		Temp. Rise @ S.F. Load	46°C	
		Locked-rotor Power Factor	46.9	
		Rotor inertia	0.201 lb-ft <sup>2</sup>	

**Load Characteristics 575 V, 60 Hz, 2 HP**

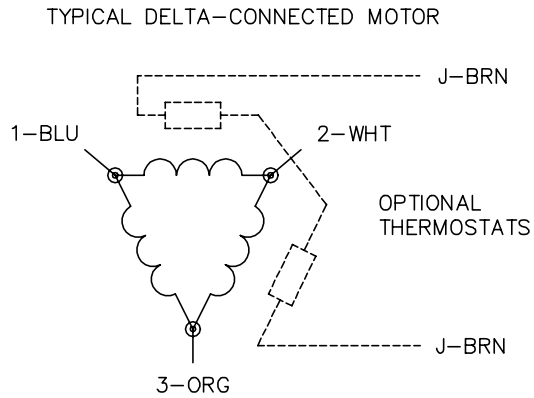
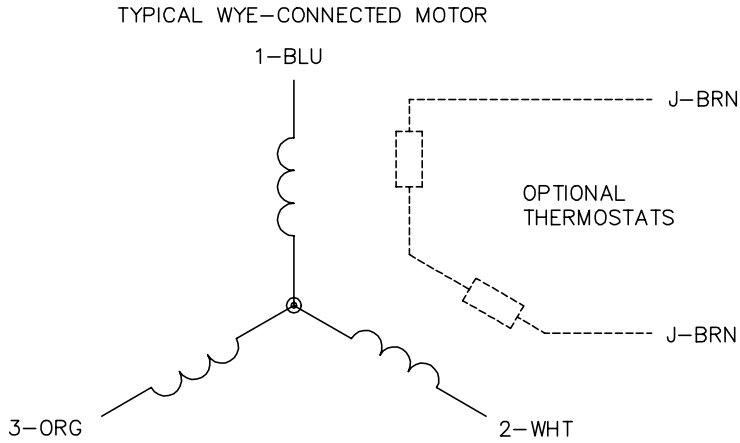
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	54	67	75	80	83	79
Efficiency	80.4	86.9	88.7	86.5	88.1	87.2	88.1
Speed	1790	1780	1770	1760	1748	1736	1747
Line amperes	1.42	1.63	1.91	2.27	2.66	3.1	2.5

Performance Graph at 575V, 60Hz, 2.0HP Typical performance - Not guaranteed values





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

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MTL: -	© □	

**BALDOR - RELIANCE®**

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

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