

ABB BALDOR RELIANCE III

Customer information packet

VECP83586T-4

2HP, 3490RPM, 3PH, 60HZ, 145TC, 0526M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	145TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CL I GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	1.8
Current @ Voltage	2.440 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	W
Type	AC
Mech. spec.	05F161
Base	
Status	PRD/A
Elec. spec.	05WGX123
Layout	05LYF161
Eff. date	03-24-2026
CD Diagram	CD0006
Poles	02
Leads	3#18,0#,0#,0# Y
Proprietary	False
Created date	07-05-2016

Haz Area Temp Code	T4
Heater Indicator	No Heater
High Voltage Full Load Amps	2.4 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	@ 0 AWG 3 @ 18 AWG
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	0526M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.58 IN
Power Factor	88
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3490 rpm
Speed Code	Single Speed
Starting Method	Direct on line

Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP4328									
CAT.NO.	VECP83586T-4								
SPEC.	05F161X123G1								
HP	2 TE				IP	56			
VOLTS	460								
AMPS	2.44								
R.P.M.	3490								
FRAME	145TC		HZ		60		PH	3	
SER.F.	1.15	CODE	L	DES.	B	CLASS		F	
RATING	40C AMB-CONT								
SN									
DE	6205		ODE		6205				
NEMA NOM. EFF.	85.5		P.F.		88				
GUAR. MIN. EFF.	82.5		CC		010A				
T. CODE	T4		TEMP=		135				

NP3186						
SPEC.	05F161X123G1					
ABMA DE BRG	25BC02X30X					
ABMA ODE BRG	25BC02X30X					
GREASE	POLYREX EM					
MOTOR WEIGHT	83	ROTOR BARS	20	STATOR BARS	24	
MAX. R.P.M.	5400	MAX. KVAR	0.1			
INV.TYPE	PWM					
T=	135					
CHP	60	TO	90			
CT	1.8	TO	60			
VT	0-	TO	60			
HTR-VOLTS	N/A	HTR-AMPS	N/A			
HTR-WATTS	N/A	MAX. SPACE HEATER TEMP.				N/A

Parts List

Part number	Description	Quantity
SA324181	SA 05F161X123G1	1.000 ea
RA312012	RA 05F161X123G1	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
05EP1100A03G	FREP TEFC 203,GRSR,RLF,NO DRAIN	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
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
35EP1329A33G	EP ENCL,GRSR,RLF,(2).25-28 DRAINS, INPRO	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	2.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HA3100A28	THRUBOLT 10-32 X 8.187	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH1000A27G	35FH1000A27 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
35FH4500A01	DRIP COVER, STAMPED X - W/PRIMED	1.000 ea
HA2001A13	35-10103 SPACER WELKER	3.000 ea

51XN1032A20	10-32 X 1 1/4 HX WS SL SR	3.000 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
MJ5001A02	732 CL SEALANT 3 OZ DIXIE BEARING 289100	0.010 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
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	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, POLYREX EM EXXON	0.050 lb
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.010 ga
LC0006	CONNECTION LABEL	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
NP4328	SS IEEE841-2021 DIV-2 UL EEV CSA-C US	1.000 ea
NP3186	SS IEEE841 INV AUX DATA INFORMATION	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 92393

Typical performance - not guaranteed values

Winding: 05WGX123-R004			Type: 0526M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		2	Full Load Torque		2.98 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		2.5	Breakdown Torque		14.2 LB-FT		
R.P.M.		3490	Pull-up Torque		6.33 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		11.2 LB-FT	
NEMA Design Code		B	KVA Code	M	Starting Current		25 A
Service Factor (S.F.)		1.15	No-load Current		0.912 A		
NEMA Nom. Eff.		85.5	Power Factor	88	Line-line Res. @ 25°C		6.88 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		44°C	
S.F. Amps				Temp. Rise @ S.F. Load		52°C	
				Locked-rotor Power Factor		49.9	
				Rotor inertia		0.0719 lb-ft²	

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	55	75	84	88	90	91	89
Efficiency	73.4	83.6	85.8	85.5	85.8	84.7	86
Speed	3572	3547	3520	3492	3461	3426	3473
Line amperes	1.1	1.47	1.93	2.44	3	3.61	2.78

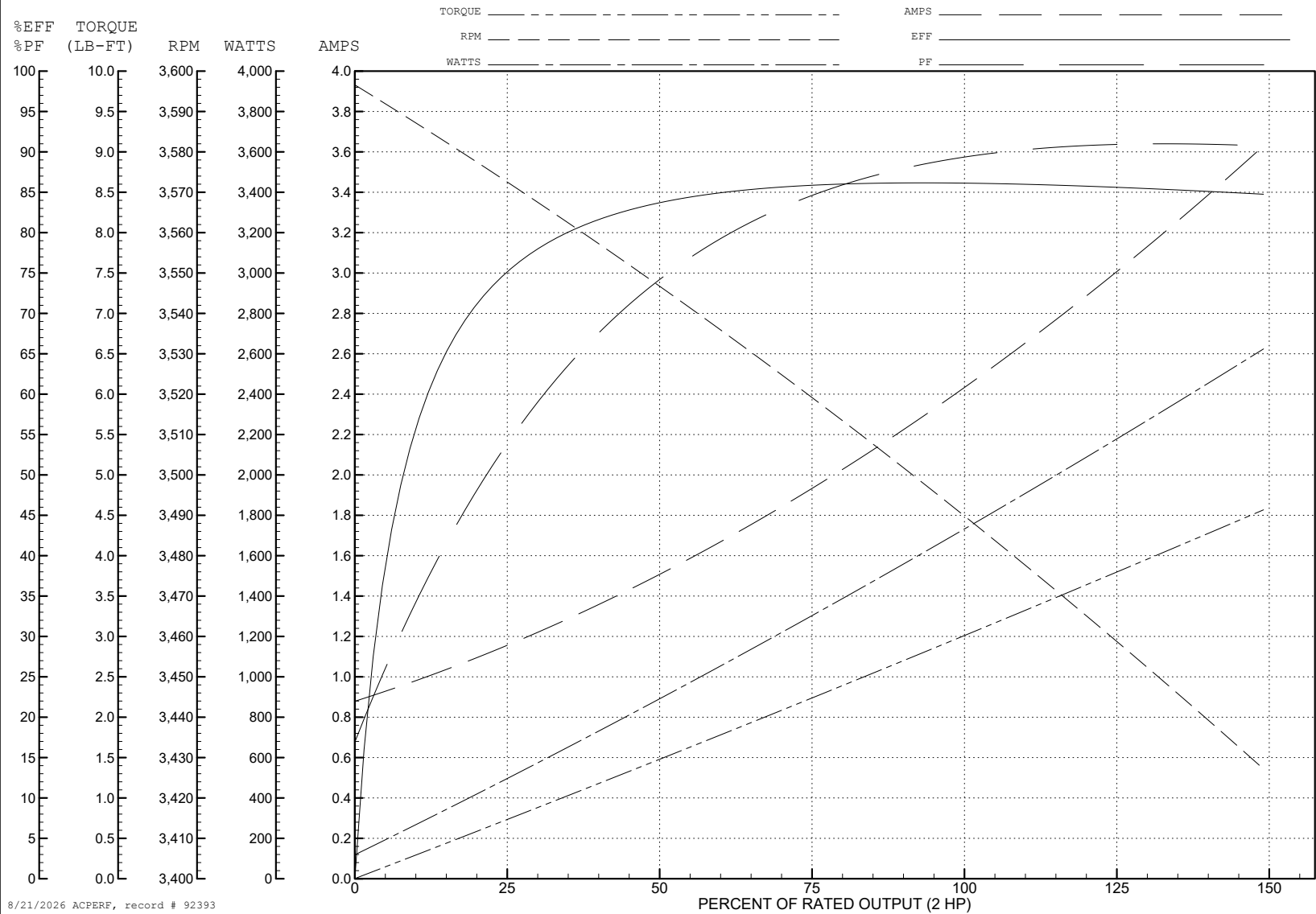
ABB Motors and Mechanical Inc.

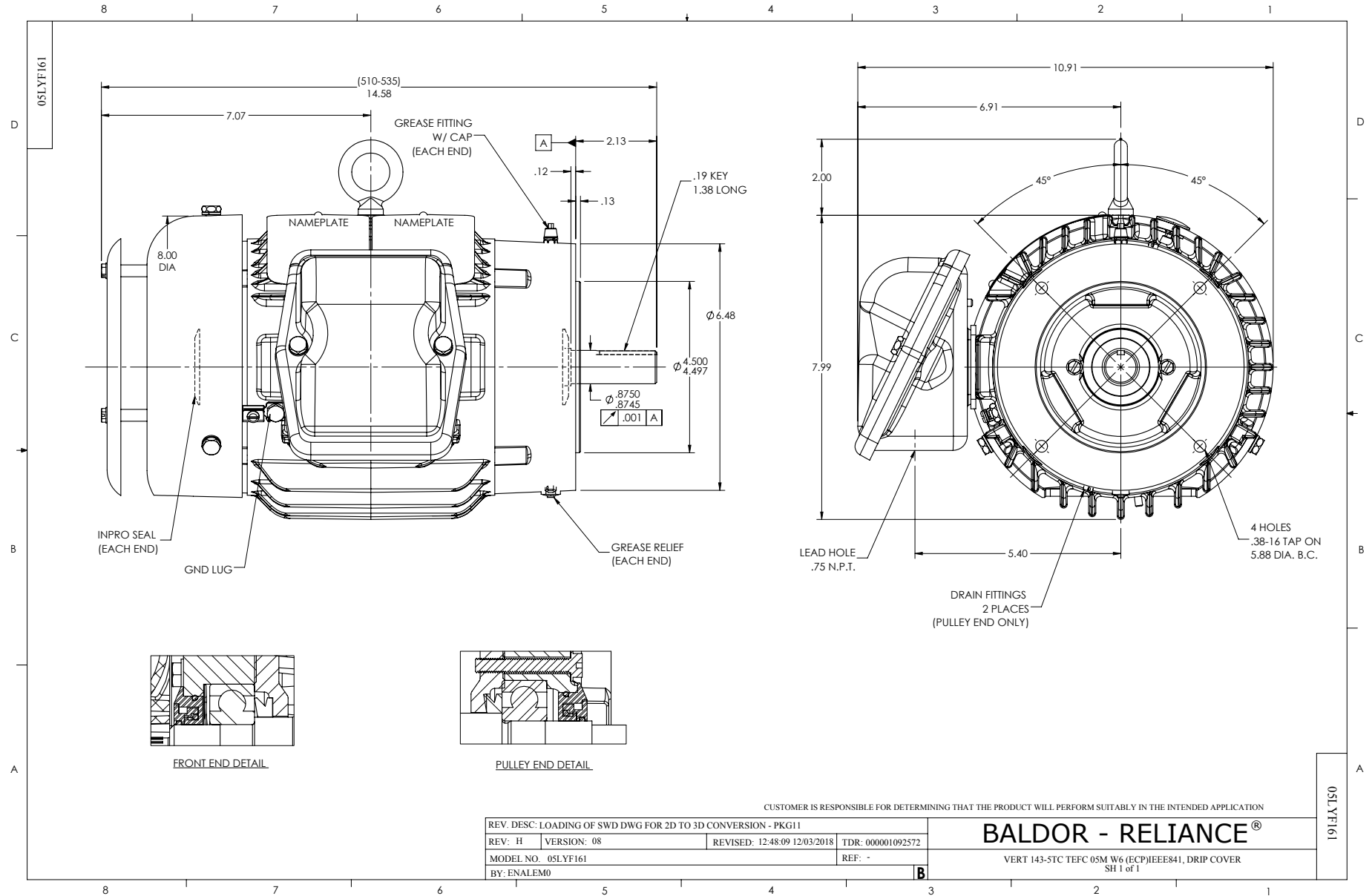
WINDING # 05WGX123

Typical performance - not guaranteed values.

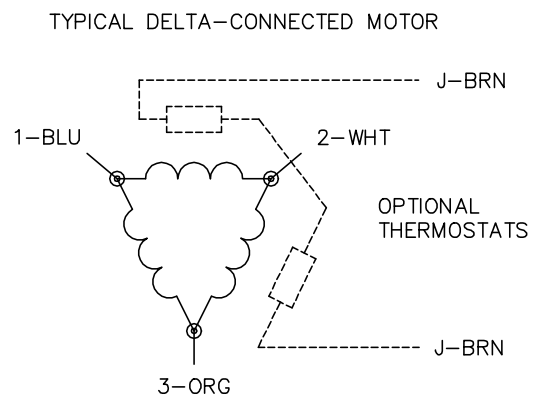
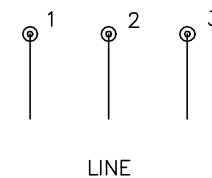
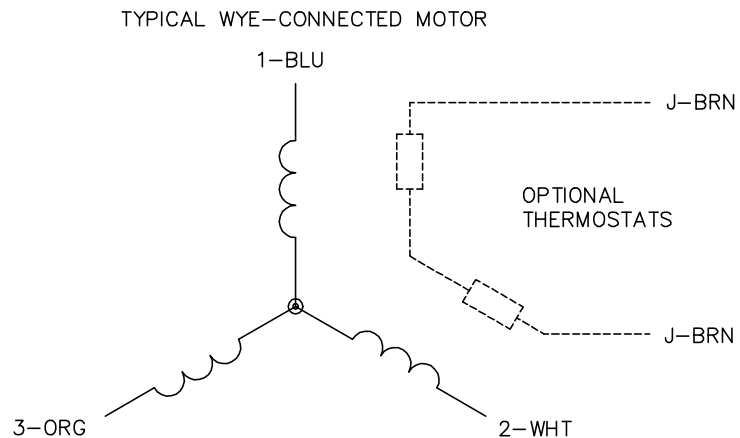
2 HP 3 PH 60 HZ 3490 RPM 460 V 0526M

TORQUES (LB-FT): PO=14.2 PU=6.33 LR=11.2 LRA=25





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

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

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

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