ABB BALDOR RELIANCE

Customer information packet

XM040542A

.5HP, 1725RPM, 3PH, 60HZ, 48, 3416M, XPFC, F1, N
Class - CLI GP D; CLII GP F,G
Division - Division I

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Specifications

Enclosure	XPFC
Frame	48
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	208.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CSA
	UL
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.000 A @ 460.0 V
	2.000 A @ 230.0 V
	2.100 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	74.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	34WG1543
Layout	34LY5427
Eff. date	10-24-2024
CD Diagram	CD0007
Poles	04
Leads	12#18
Proprietary	False
Created date	03-10-2021

High Voltage Full Load Amps	1.0 a
Insulation Class	B
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3416M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.85 IN
Power Factor	63
Product Family	Hazardous Location Motor
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.500 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1725 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	Automatic Thermal Overload
Winding Thermal 1 Location	EP
Winding Thermal 2	None

Nameplate

NP0016XPSL							
NO.			**CC**				
SER. #							
SPEC	34-0000-0400						
CAT.NO.	XM040542A						
H.P.	.5		**T. CODE**	T3C			
VOLTS	208-230/460						
AMPS	2.1-2/1						
R.P.M.	1725						
HZ	60	**PH**	3	**CLASS**	B		
SER.F.	1.00	**DES**	B	**CODE**	L		
RATING	40C AMB-CONT						
FRAME	48			**NEMA NOM. EFF**	74		
	PF	63					
BLANK	NEMA MG-1 PART 5, IP54						

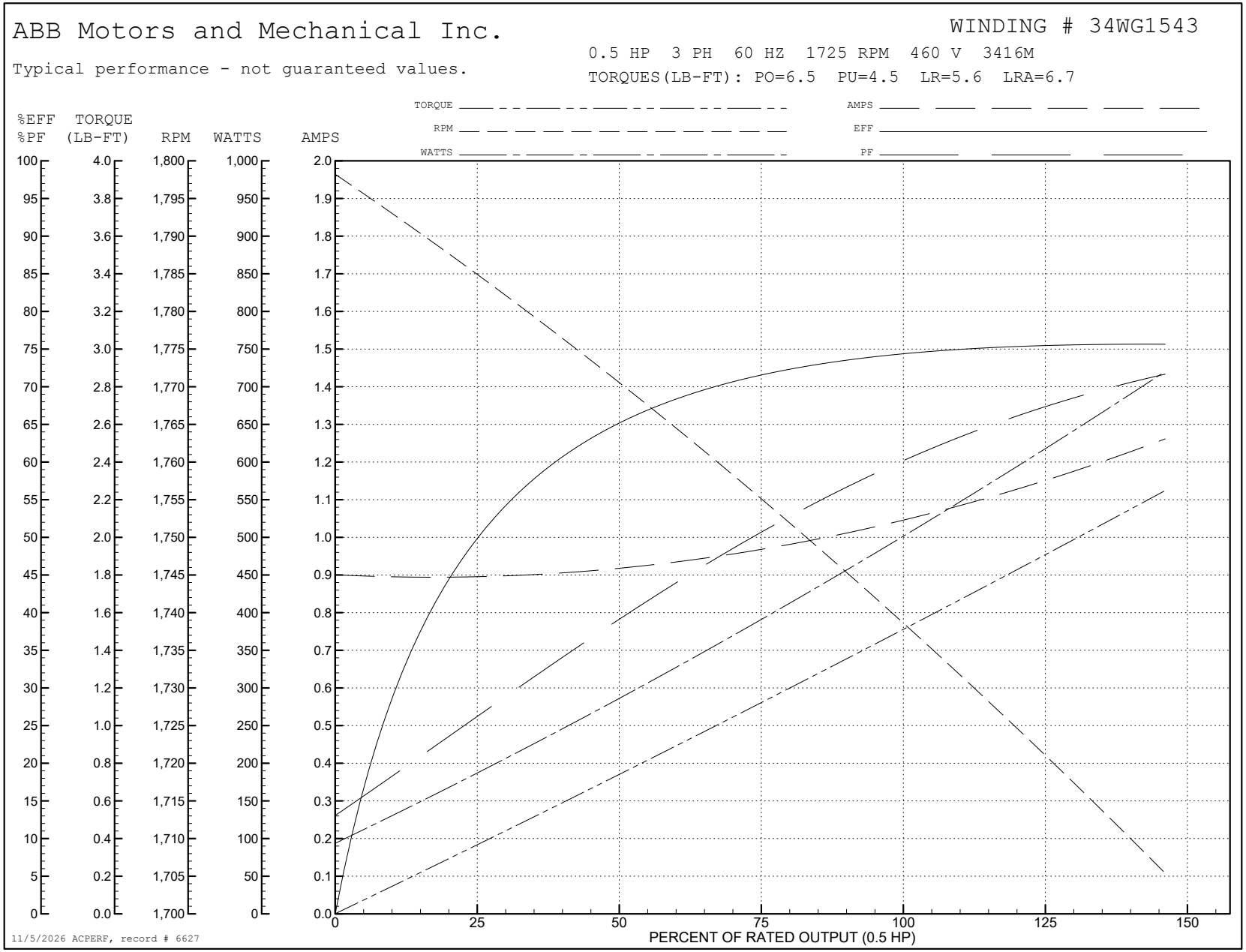
AC Induction Motor Performance Data
Record # 6627
Typical performance - not guaranteed values

Winding: 34WG1543-R002	**Type:** 3416M	**Enclosure:** XPFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	1.5 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			2.1-2/1	**Breakdown Torque**	6.5 LB-FT
R.P.M.			1725	**Pull-up Torque**	4.5 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	5.6 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	6.7 A
Service Factor (S.F.)			1	**No-load Current**	0.89 A
NEMA Nom. Eff.	74	**Power Factor**	63	**Line-line Res. @ 25ºC**	33 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	59°C

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	27	39	51	60	67	72
Efficiency	49.8	65	71.7	74.5	75.6	75.5
Speed	1785	1770	1756	1737	1724	1705
Line amperes	0.9	0.94	0.98	1	1.15	1.27


ABB Motors and Mechanical Inc.
WINDING # 34WG1543
0.5 HP 3 PH 60 HZ 1725 RPM 460 V 3416M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=6.5 PU=4.5 LR=5.6 LRA=6.7
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.5 HP)
11/5/2026 ACPERF, record # 6627

AC Induction Motor Performance Data
Record # 20790
Typical performance - not guaranteed values

Winding: 34WG1543-R002	**Type:** 3416M	**Enclosure:** XPFC

Nameplate Data				**208 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	1.51 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			2.1-2/1	**Breakdown Torque**	5.25 LB-FT
R.P.M.			1725	**Pull-up Torque**	3.56 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	4.43 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	11.8 A
Service Factor (S.F.)			1	**No-load Current**	1.39 A
NEMA Nom. Eff.	74	**Power Factor**	63	**Line-line Res. @ 25ºC**	8.35 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	50°C
				Locked-rotor Power Factor	65
				Rotor inertia	0.0381 LB-FT2

Load Characteristics 208 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	37	52	65	77	79	81
Efficiency	49.3	64.9	71.8	74.4	75.5	75.5
Speed	1782	1765	1748	1725	1707	1683
Line amperes	1.43	1.54	1.67	1.79	2.14	2.47

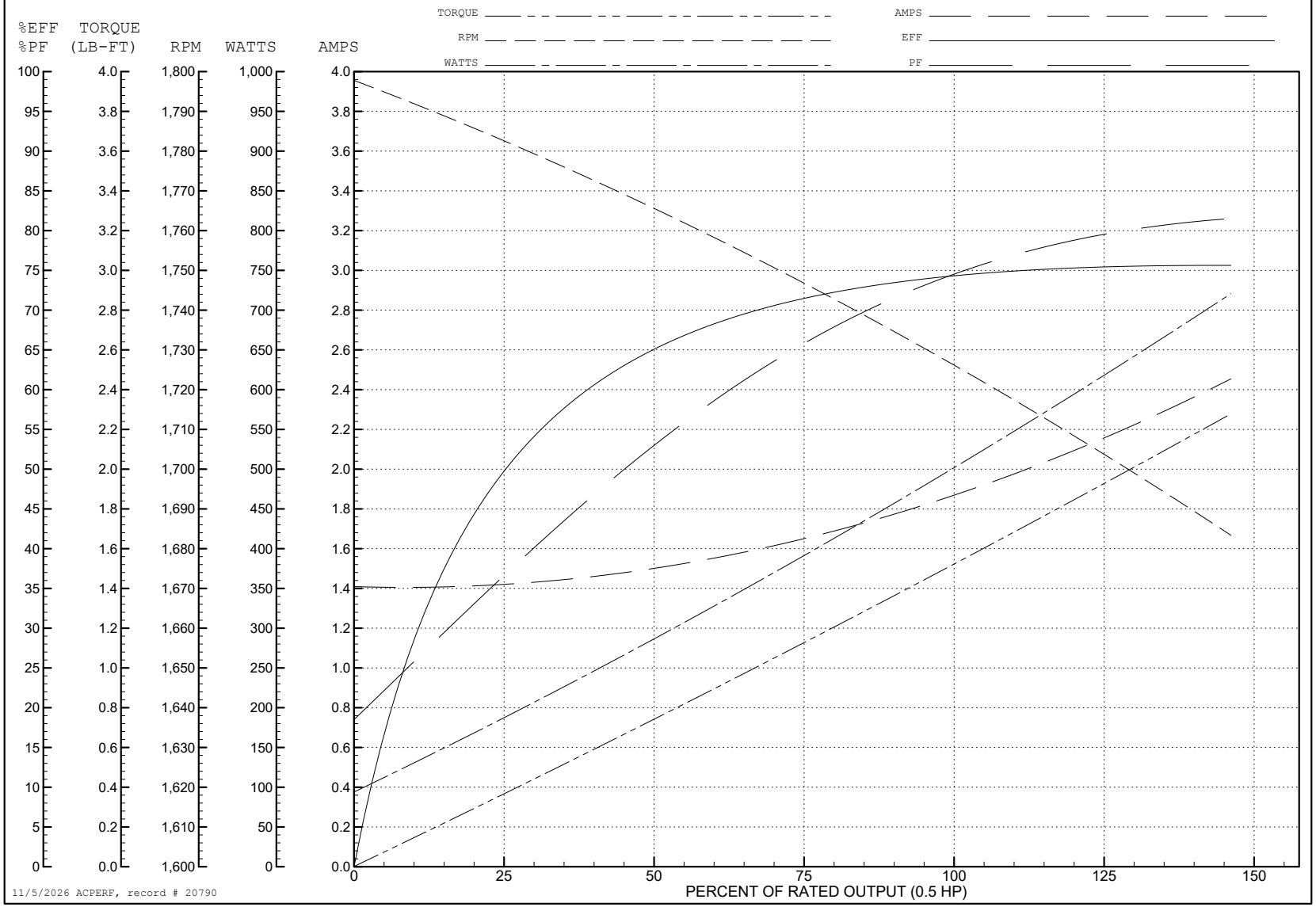
ABB Motors and Mechanical Inc.

WINDING # 34WG1543

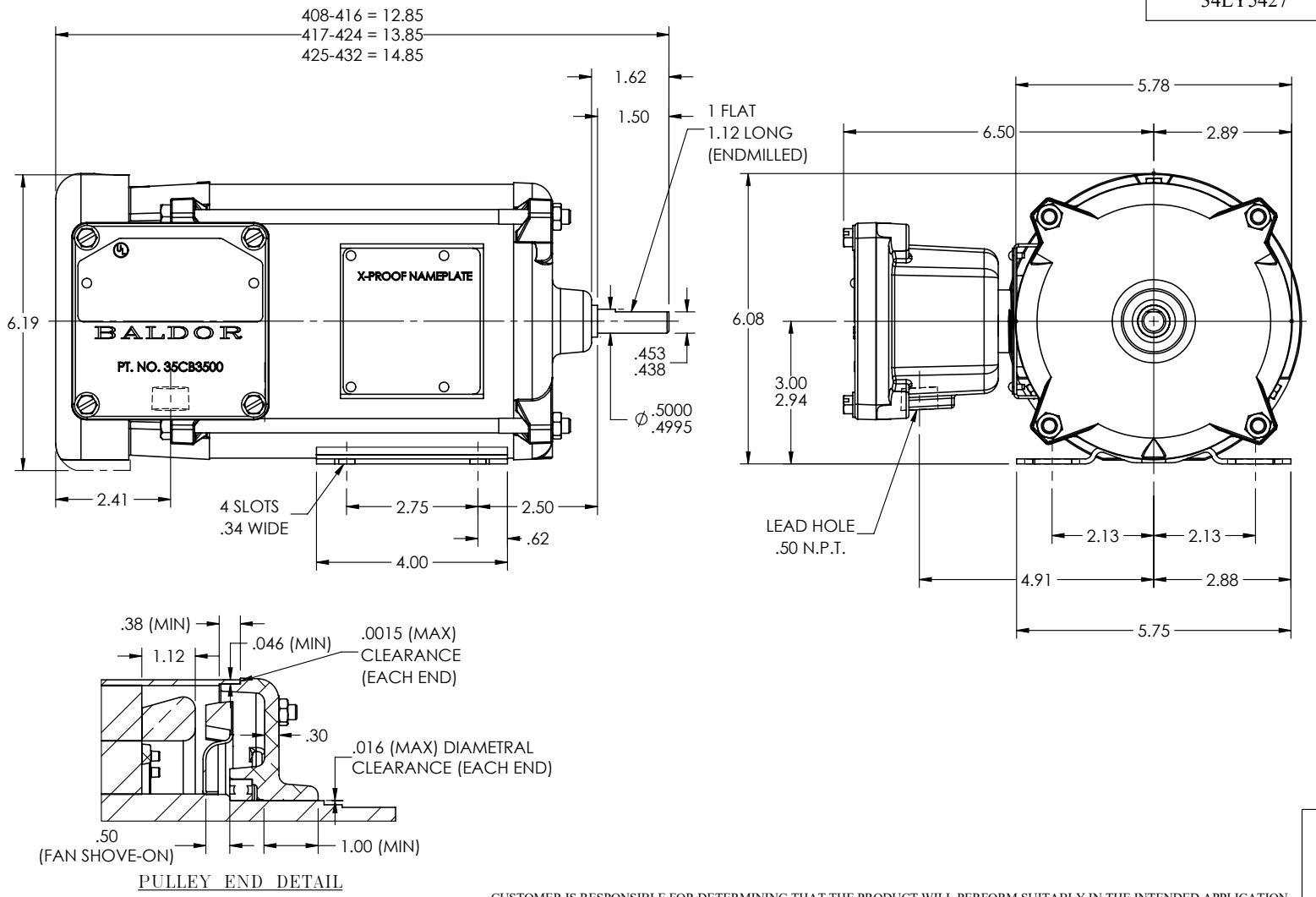
0.5 HP 3 PH 60 HZ 1725 RPM 208 V 3416M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=5.25 PU=3.56 LR=4.43 LRA=11.8



34LY5427



PULLEY END DETAIL

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

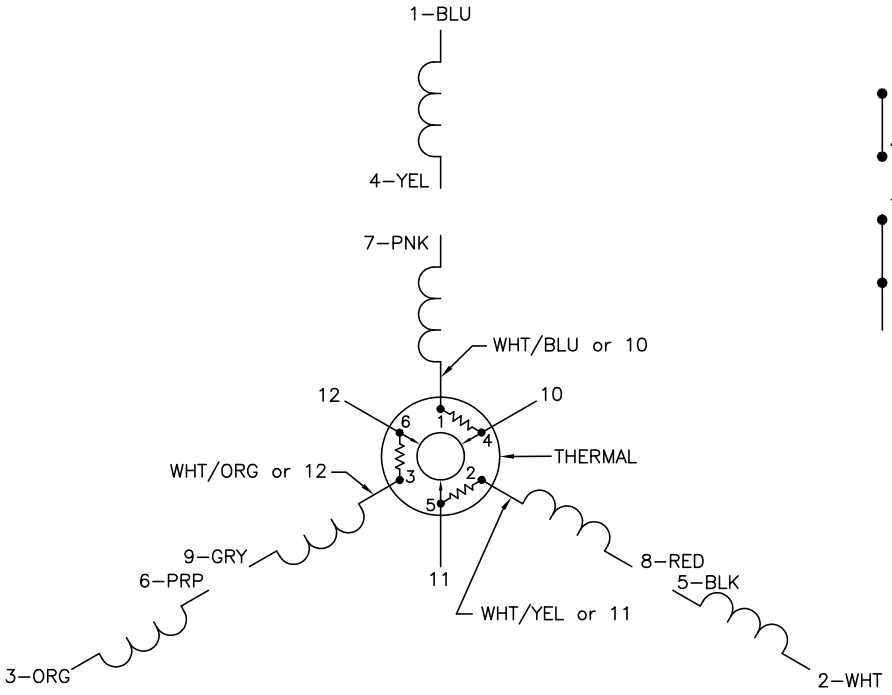
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REV: G	VERSION: 05	REVISED: 03:28:58 12/15/2022	TDR: 000001201165
34LY5427	MODEL NO. 34LY5427		REF: -
	BY: ENFRAJ0		

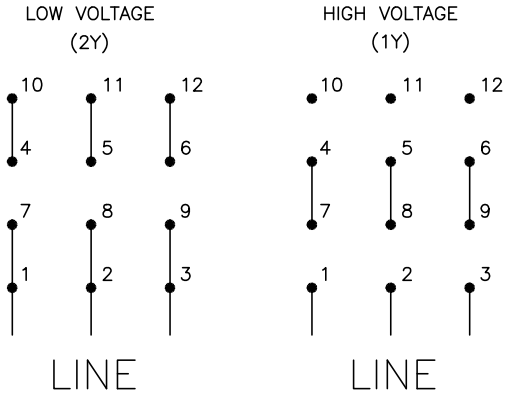
BALDOR - RELIANCE®

HORZ X34M 48 XPFC CL-I GP-D, CL-II GP-F&G, .50 NPT LEAD

34LY5427

CD0007





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: ADDED "CK" PLANT CODE			BALDOR ELECTRIC Co.
REV. LTR: E	BY: EAH	REVISED: 05/06/99 17:1	TDR: 0181040
CD0007		FILE: AAA00008370	MDL: –
		MTL: –	3PH, DV, THERMAL, 12 LEADS

CD0007