

ABB BALDOR RELIANCE III

Customer information packet

VXM050742A

0.75HP, 1725RPM, 3PH, 60HZ, 56C, XPFC, F1

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	56C
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	.750 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	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.500 A @ 460.0 V 3.000 A @ 230.0 V 3.200 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	73.0 %
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.	34WG5721
Layout	34LY5336
Eff. date	05-01-2024
CD Diagram	CD0007
Poles	04
Leads	12#18
Proprietary	False
Created date	08-04-2020

High Voltage Full Load Amps	1.5 a
Insulation Class	B
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3420M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.22 IN
Power Factor	58
Product Family	Hazardous Location Motor
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.625 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	34-0000-0388								
CAT.NO.	VXM050742A								
H.P.	.75		T. CODE	T3C					
VOLTS	208-230/460								
AMPS	3.2-3/1.5								
R.P.M.	1725 34WG5721								
HZ	60		PH	3	CLASS	B			
SER.F.	1.00		DES	B	CODE	K			
RATING	40C AMB-CONT								
FRAME	56C		NEMA NOM. EFF	73					
		PF	58						
BLANK	NEMA MG-1 PART 5, IP54								

AC Induction Motor Performance Data

Record # 6818

Typical performance - not guaranteed values

Winding: 34WG5721-R001			Type: 3420M		Enclosure: XPFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.75	Full Load Torque		2.25 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		3.2-3/1.5	Breakdown Torque		10 LB-FT		
R.P.M.		1725	Pull-up Torque		8.5 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		8.8 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		10 A
Service Factor (S.F.)			1	No-load Current		1.2 A	
NEMA Nom. Eff.		73	Power Factor	58	Line-line Res. @ 25°C		17.7 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		74°C	

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	28	42	55	64	71	76
Efficiency	56.1	69.7	74.7	76.2	76.1	75.2
Speed	1783	1766	1749	1731	1711	1693
Line amperes	1.2	1.2	1.3	1.5	1.6	1.8

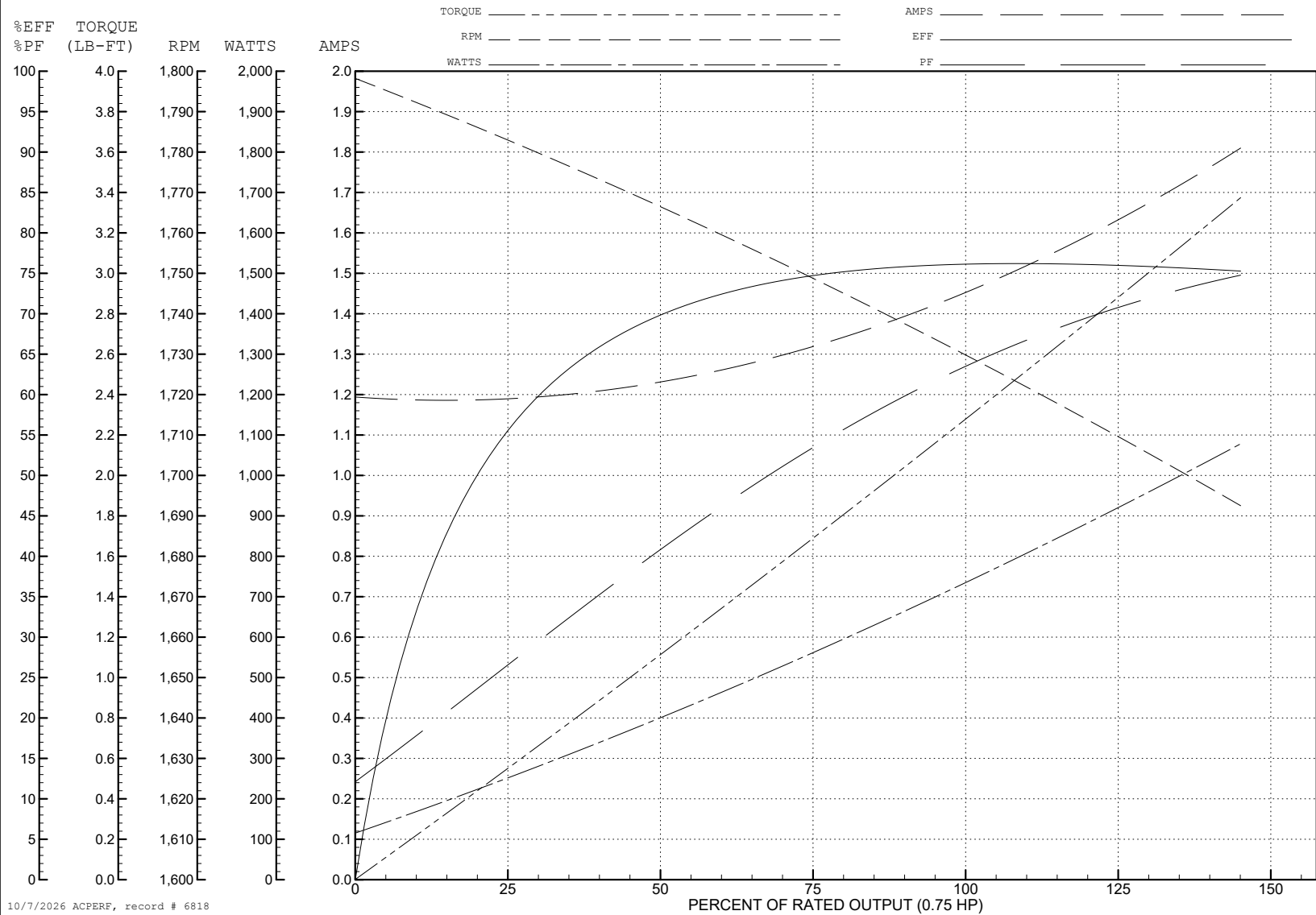
ABB Motors and Mechanical Inc.

WINDING # 34WG5721

Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 1725 RPM 460 V 3420M

TORQUES (LB-FT): PO=10 PU=8.5 LR=8.8 LRA=10



AC Induction Motor Performance Data

Record # 52509

Typical performance - not guaranteed values

Winding: 34WG5721-R001			Type: 3420M		Enclosure: XPFC	
Nameplate Data				208 V, 60 Hz: Low Voltage Connection		
Rated Output (HP)		.75		Full Load Torque		2.26 LB-FT
Volts		208-230/460		Start Configuration		direct on line
Full Load Amps		3.2-3/1.5		Breakdown Torque		8.04 LB-FT
R.P.M.		1725		Pull-up Torque		6.66 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		6.89 LB-FT
NEMA Design Code		B	KVA Code	Starting Current		17.58 A
Service Factor (S.F.)		1		No-load Current		1.856 A
NEMA Nom. Eff.		73	Power Factor	Line-line Res. @ 25°C		4.425 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C
				Locked-rotor Power Factor		57.4
				Rotor inertia		0.0476 LB-FT2

Load Characteristics 208 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	33	53	67	73	82	85
Efficiency	64	75.4	78.7	78.5	77.6	75.9
Speed	1780	1761	1740	1719	1695	1672
Line amperes	1.888	1.958	2.22	2.68	3	3.5

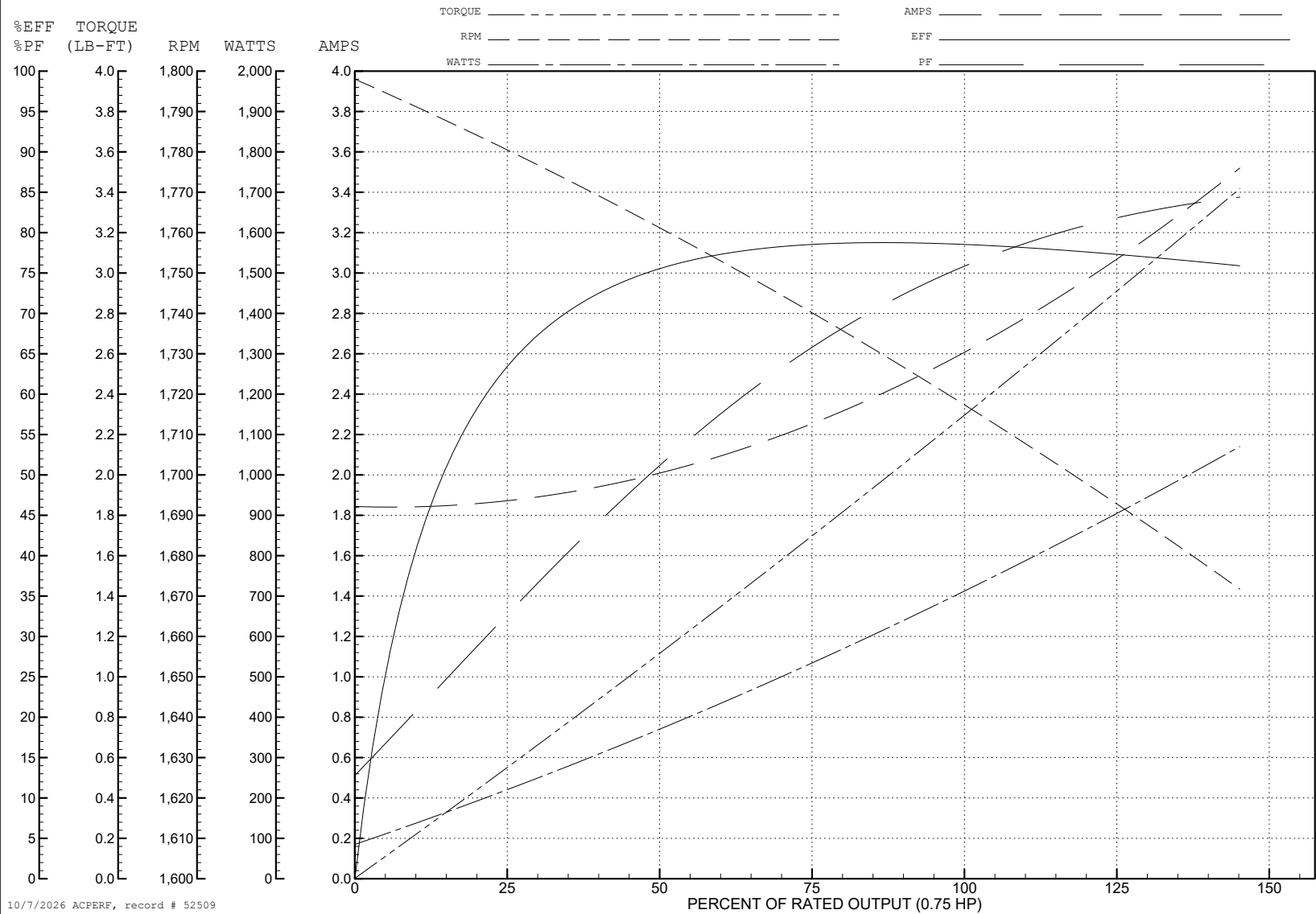
ABB Motors and Mechanical Inc.

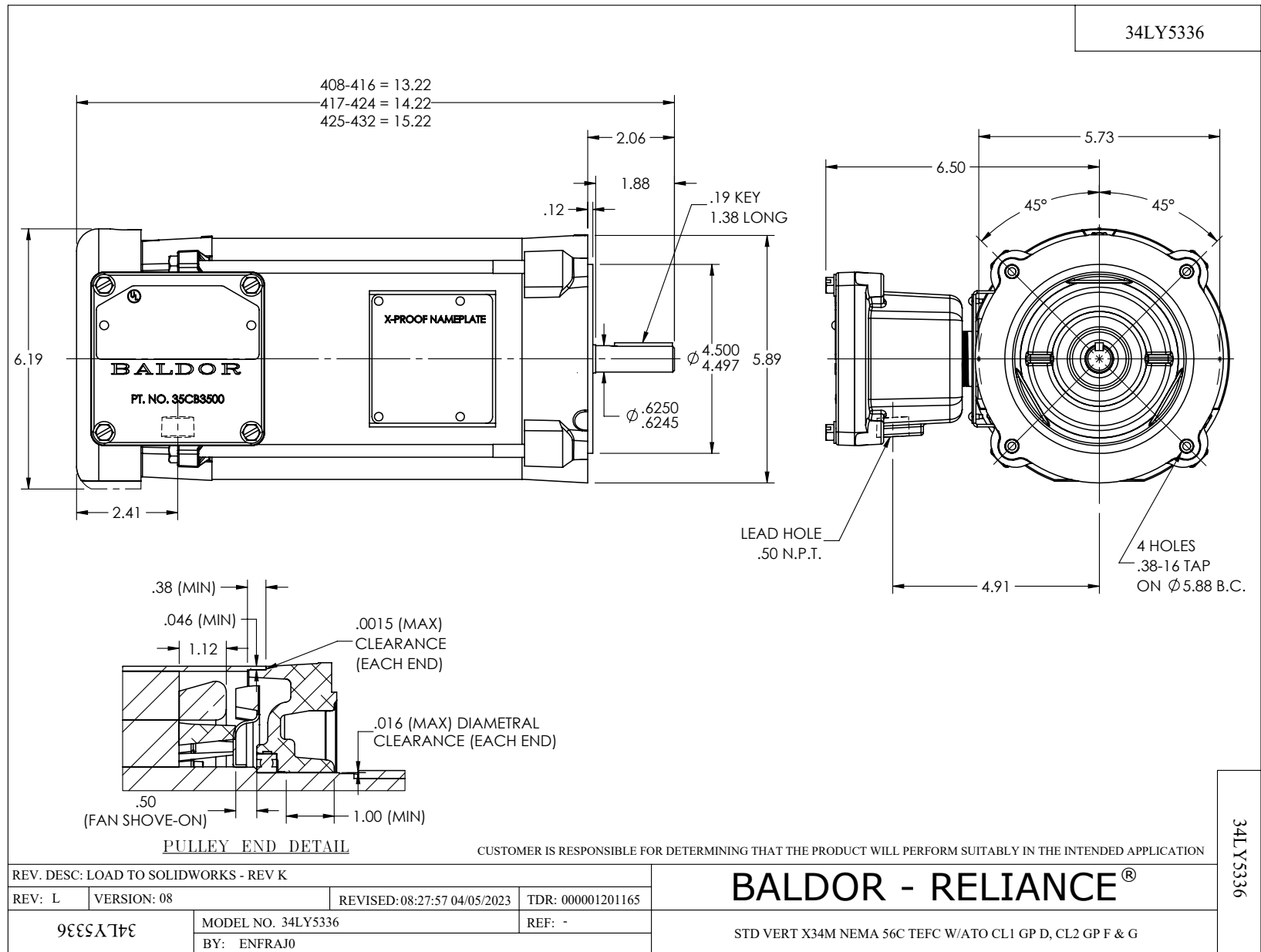
WINDING # 34WG5721

Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 1725 RPM 208 V 3420M

TORQUES (LB-FT) : PO=8.04 PU=6.66 LR=6.89 LRA=17.58





418174-033

WINDING

RTD'S

PHASE 'A'

OPP DRIVE END [1TD1
1TD2
2TD1
2TD2
3TD1
3TD2
4TD1
4TD2
5TD1
5TD2
6TD1
6TD2

PHASE 'B'

OPP DRIVE END [3TD1
3TD2
4TD1
4TD2
5TD1
5TD2
6TD1
6TD2

PHASE 'C'

OPP DRIVE END [5TD1
5TD2
6TD1
6TD2

REV. DESC: REMOVED "ACCESSORIES IN MAIN CONDUIT BOX"

REV. LTR: B

FILE: \RAG\00013\851

MTL: -

VERSION: 02

REVISED: 09:59:51 05/01/2013

TDR: 000000797580

BY: RAGJSS1

BALDOR

A-C MOTOR CONNECTION DIAGRAM ACCESSORIES IN MAIN CONDUIT BOX

SH 1 of 1

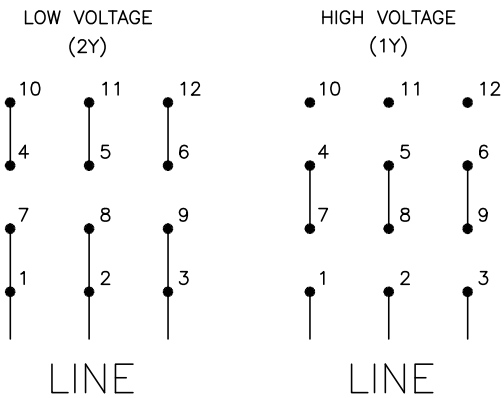
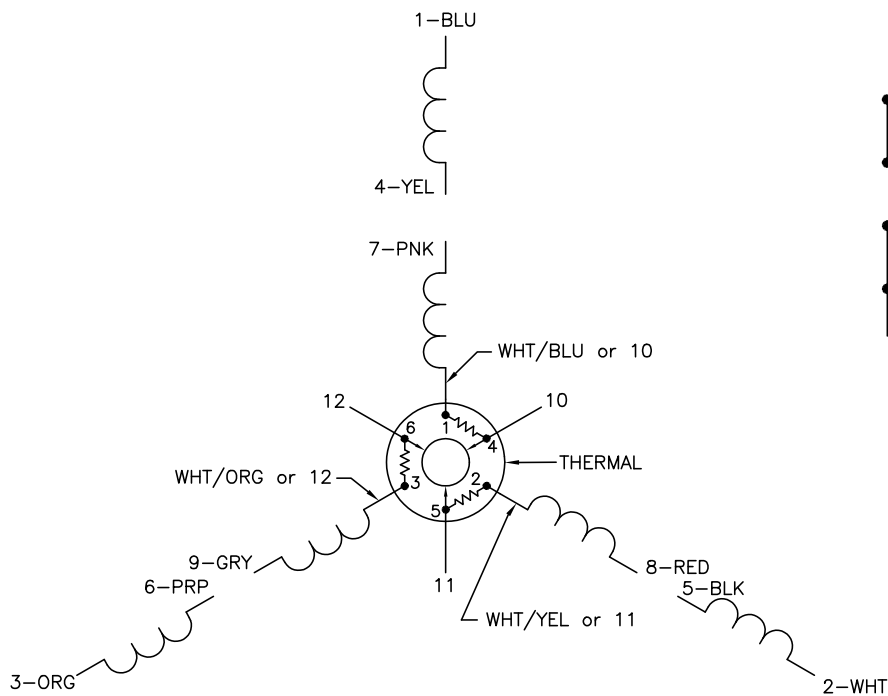
418174-033

CUSTOMER
ORDER NO. _____

CUSTOMER
SHEET NO. _____ OF _____

S. D. NO. _____
D. D. DATE _____

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			
REV. LTR: E	BY: EAH	REVISED: 05/06/99 17:1	TDR: 0181040
L00000		FILE: AAA00008370	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, THERMAL, 12 LEADS

CD0007