

ABB BALDOR RELIANCE III

Customer information packet

VBM3710T-D

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 3731M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	UR CE CSA
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
Brake Torque	25.0 lb-ft
Current @ Voltage	22.000 A @ 208.0 V 20.200 A @ 230.0 V 10.100 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part Detail

Revision	G
Type	AC
Mech. spec.	37M909
Base	
Status	NLA/A
Elec. spec.	37WGS150
Layout	37LYM909
Eff. date	03-08-2016
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	02-22-2013

Front Face Code	Fan Housing Cover For Brake
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	10.1 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3731M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.01 IN
Power Factor	77
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP1372L									
CAT.NO.									
SPEC.	37M909S150H1								
HP	7.5								
VOLTS	208-230/460								
AMP	22-20.2/10.1								
FRAME	213TC		HZ	60			PH	3	
SER.F.	1.15	CODE	K	DES	A	CL	F		
NEMA-NOM-EFF	89.5	PF	77						
RATING	40C AMB-CONT								
CC	010A								
DE	6307		ODE	6206					
ENCL	TEFC	SN							
	IP44								

AC Induction Motor Performance Data

Record # 22653

Typical performance - not guaranteed values

Winding: 37WGS150-R001			Type: 3732M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5	Full Load Torque		22.14 LB-FT	
Volts		208-230/460	Start Configuration		direct on line	
Full Load Amps		22-20.2/10.1	Breakdown Torque		78.19 LB-FT	
R.P.M.		1770	Pull-up Torque		34.99 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		48.08 LB-FT
NEMA Design Code		A	KVA Code	Starting Current		78.69 A
Service Factor (S.F.)		1.15	No-load Current		5.26 A	
NEMA Nom. Eff.		89.5	Power Factor	Line-line Res. @ 25°C		1.39 Ω
Rating - Duty		40C	AMB-CONT	Temp. Rise @ Rated Load		69°C
S.F. Amps				Temp. Rise @ S.F. Load		81°C
				Locked-rotor Power Factor		38.8
				Rotor inertia		0.787 LB-FT2

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	58	71	77	81	83	79
Efficiency	81.5	88.2	89.6	90	88.8	88	89.4
Speed	1792	1786	1778	1771	1762	1752	1765
Line amperes	5.74	6.79	8.35	10.08	12.2	14.39	11.4

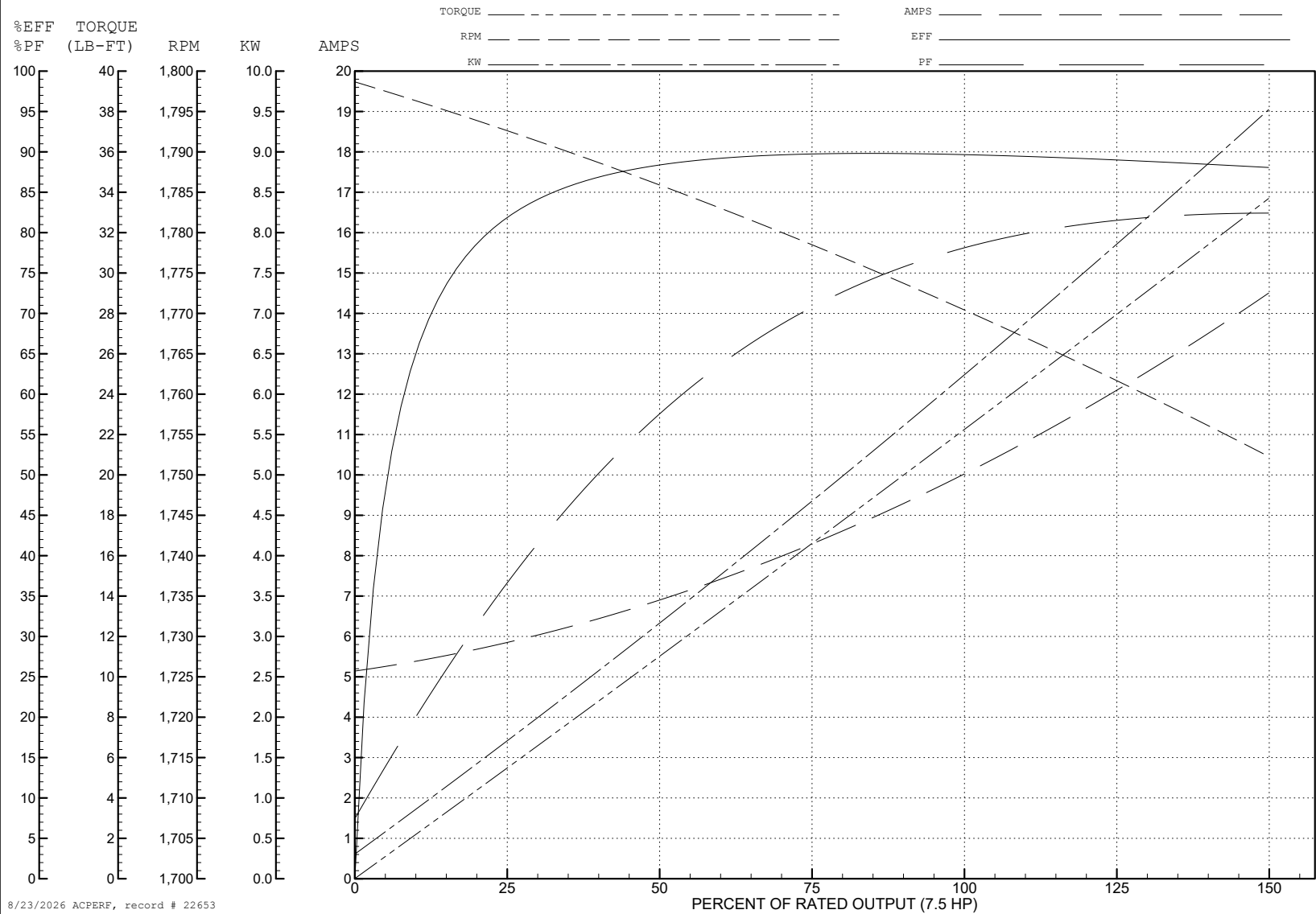
ABB Motors and Mechanical Inc.

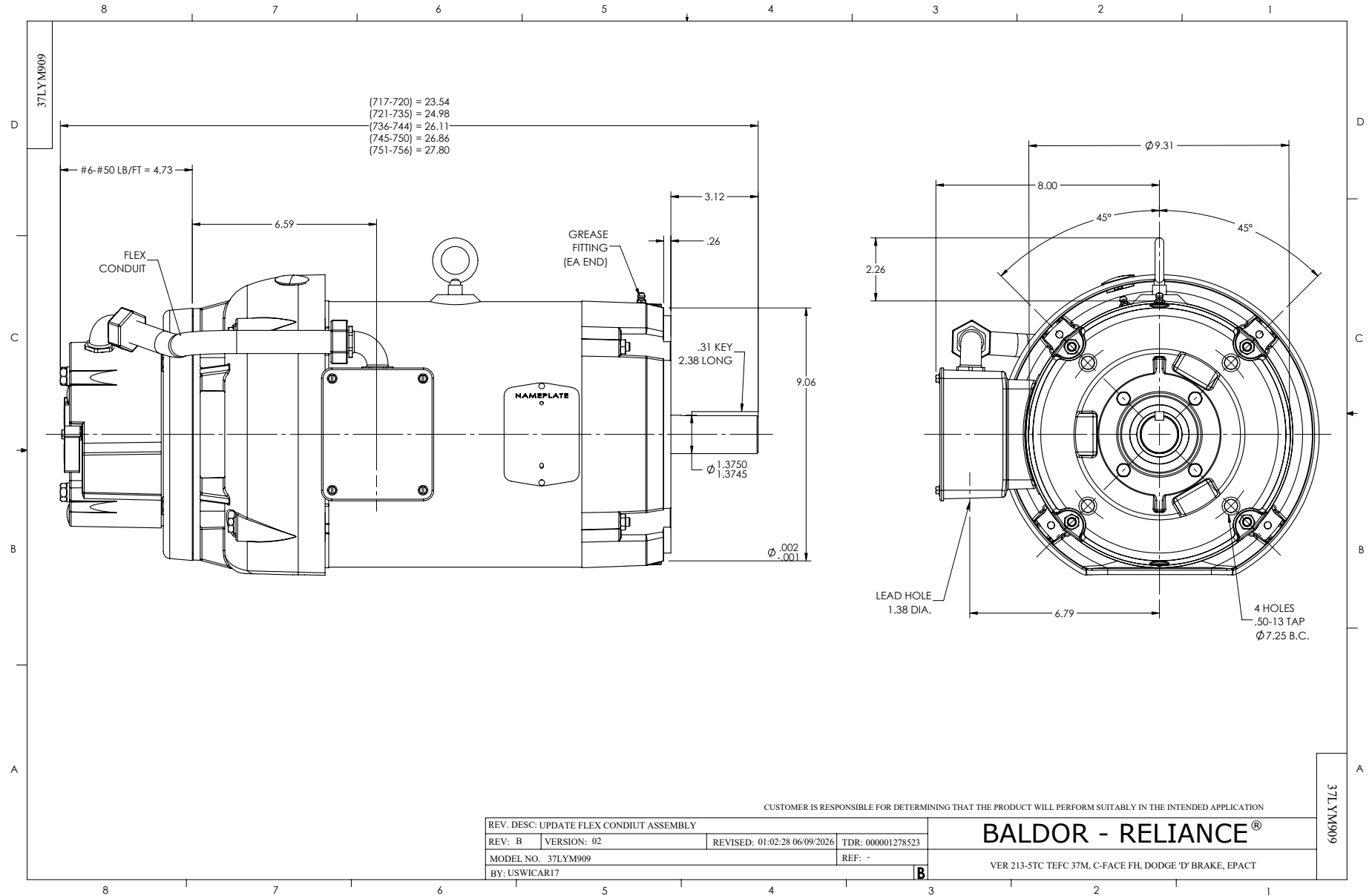
WINDING # 37WGS150

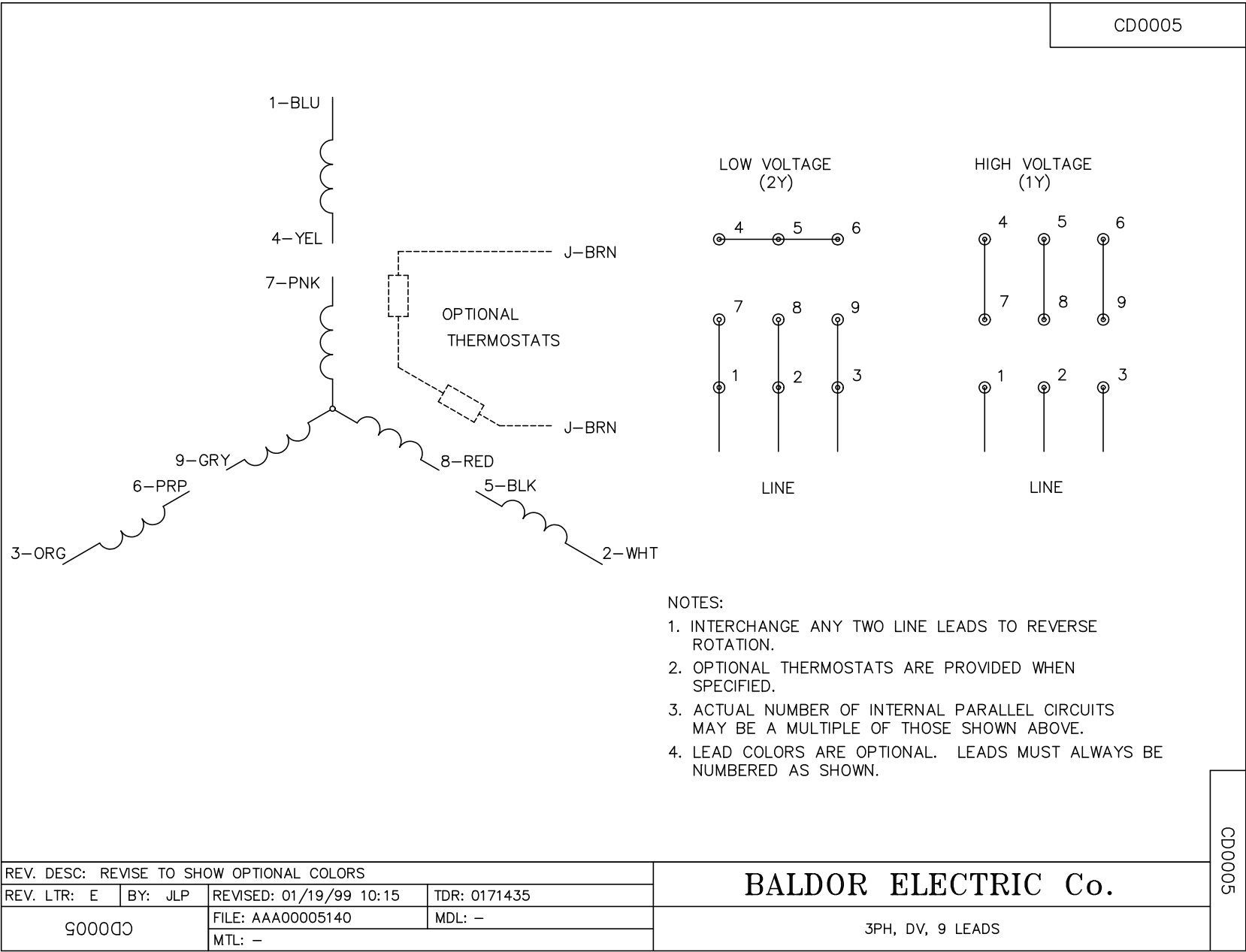
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3732M

TORQUES (LB-FT) : PO=78.19 PU=34.99 LR=48.08 LRA=78.69







CD2120

WIRING CONNECTIONS (1 PHASE VAC)

	POWER LINE A	POWER LINE B	CAP TOGETHER	CAP ALONE
AC LOW VOLT.	B1	B2	B3 & B5	B4
AC HIGH VOLT.	B1 & B5	B2	---	B3 CAP ALONE B4 CAP ALONE
DC VOLT.	B1	B2	B3 & B5	B4
				B1 WHITE B2 BLACK B3 GRAY B4 BLUE B5 RED

CD2120

REV. DESC: NEW		
REV. LTR: -	VERSION: 00	TDR: 000000741785
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MTL: -	BY: CKRONSO	

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D-SERIES MOTOR BRAKE 5LD AC\DC
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