ABB BALDOR RELIANCE

Customer information packet

VBM3538-D

.5/.37 KWHP, 1775RPM, 3PH, 60HZ, 56C, 3514M, T
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
10/31/2026 1:43:58 PM

Specifications

Enclosure	TEFC
Frame	56C
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	.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	C UR US
	CE
	CURUS
	UKCA
	WEEE
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	2.020 A @ 230.0 V
	1.900 A @ 208.0 V
	1.010 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	81.5 %
Electrically Isolated Bearing	Not Electrically Isolated

Part Detail

Revision	B
Type	AC
Mech. spec.	35X145
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYX145
Eff. date	01-12-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	09-15-2023

Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3514M
Mounting Arrangement	F3
Number of Poles	4
Overall Length	16.25 IN
Power Factor	63
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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.	VBM3538-D									
SPEC.	35X145G069G4									
HP	.5/.37 KW									
VOLTS	208-230/460									
AMP	1.9-2.02/1.01									
R.P.M. (1/MIN)	1775									
FRAME	56C		**HZ**	60			**PH**	3		
SER.F.	1.15	**CODE**	N	**DES**	B	**CL**	F			
NEMA-NOM-EFF	81.5	**PF**	63							
RATING	40C AMB-S1 CONT									
CC			IP44 IC411 20KG							
DE	6205		**ODE**	6205						
ENCL	TEFC	**SN**								
	IE2-79.0(75%)74.0(50%)									

Parts List

Part number	Description	Quantity
SA418440	SA 35X145G069G4	1.000 ea
RA410343	RA 35X145G069G4	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
S/P111-000-002	CORONA TEST, SUPER E MOTORS - FT. SMITH	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB4007	KOBX,W/PRIMER (WAS REL# 79097-49-C)	1.000 ea
35GS3023	GASKET FOR KOBX 35CB4007, CLSD CELL NEOP	1.000 ea
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 ea
WD4101A13	STEEL CAPLUG,BP-1 1/8, PLUG D3561S	2.000 ea
11XT1032G04	10-32 X 1/4" GRD SCREW	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35EP3119A01	SPL FREP TEFC 205 BRG	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
35EP3307F00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
35FH3004A01	FAN COVER ASSY, BRAKE MTG	1.000 ea
51XN1032A32	10-32 X 2 HX WS SL SR	4.000 ea
HW1001A10	WASHER, #10 SPLT LK, ZN X	4.000 ea
35FN3003A01	EXFN, PLASTIC, 5.88 OD, .626 ID	1.000 ea
BR2006B01	DBSC SPLINED HUB 5/8 BOR	1.000 ea
35CB4519	CB LID W/BLACK PRIMER	1.000 ea
35GS3019A01	LEXIDE GASKET, FOR KOBX LID 35CB4519	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
WD4006A01	WIRE JOINT,T&B RB-4 OR RB-44	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1419	CONNECTION LABEL	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1000N49	MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G,	0.017 ga
HA3100A11	THRUBOLT 10-32 X 6.750	4.000 ea

46BK0104B01	DBSC-VP-3-MA-230/460 VAC	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP1372L	ALUM UL CE UKCA WEEE CC, A60	1.000 ea
G7PA1000	PKG GRP, PRINT PK1034A07	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
PK3082	STYROFOAM CRADLE	3.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data
Record # 101693
Typical performance - not guaranteed values

Winding: 35WGG069-R085	**Type:** 3514M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			.5	**Full Load Torque**	1.48 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			1.9-2.02/1.01	**Breakdown Torque**	8 LB-FT
R.P.M.			1775	**Pull-up Torque**	4.4 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	5.1 LB-FT
NEMA Design Code	B	**KVA Code**	N	**Starting Current**	8.4 A
Service Factor (S.F.)			1.15	**No-load Current**	0.85 A
NEMA Nom. Eff.	81.5	**Power Factor**	63	**Line-line Res. @ 25ºC**	30.3 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	23°C
S.F. Amps				**Temp. Rise @ S.F. Load**	25°C
				Locked-rotor Power Factor	66.8
				Rotor inertia	0.101 lb-ft²

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	24	37	48	58	65	71	62
Efficiency	58.9	72.5	78.4	80.5	81.6	81.5	81.2
Speed	1793	1788	1782	1776	1771	1763	1773
Line amperes	0.85	0.89	0.94	1.01	1.11	1.21	1.07

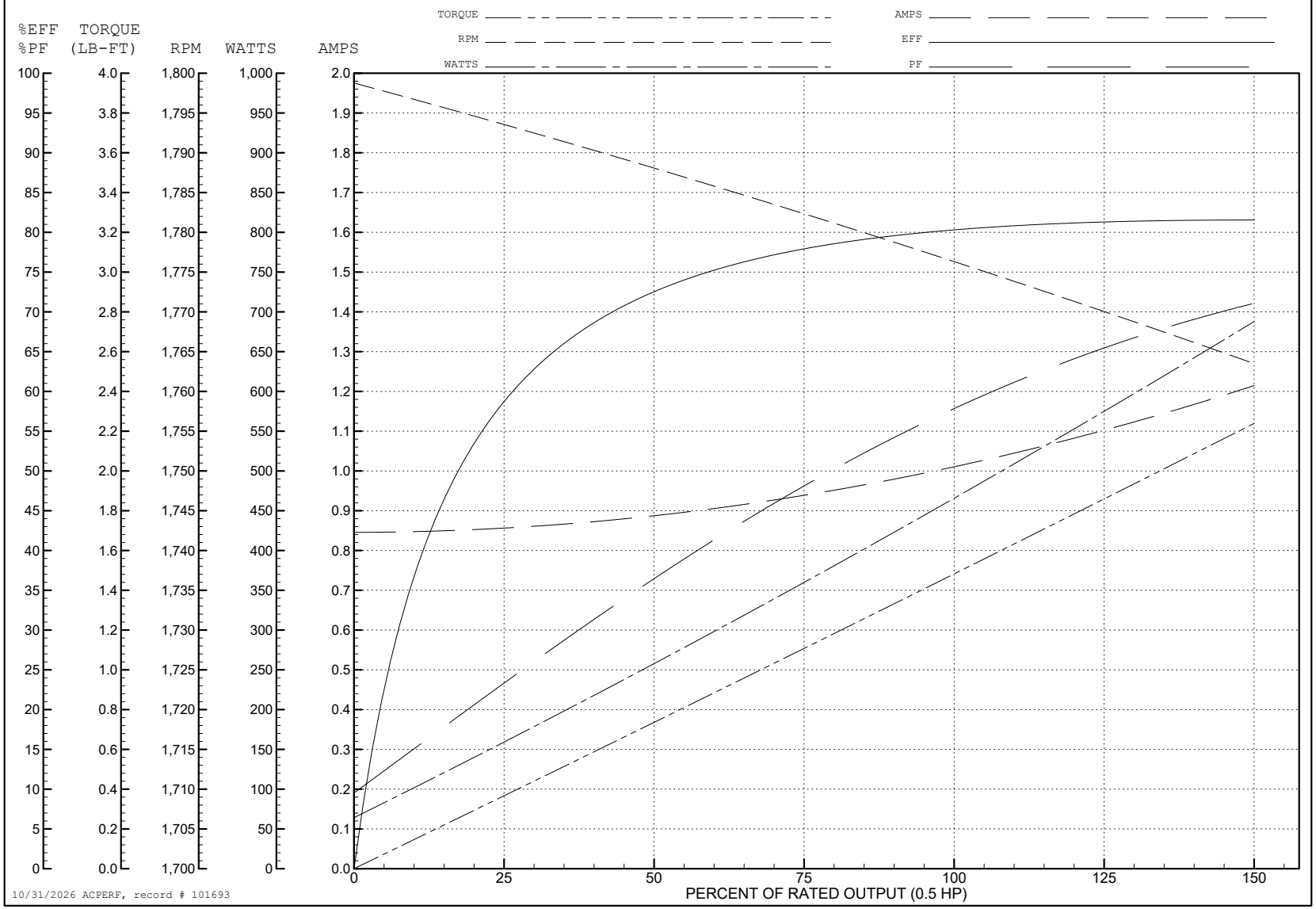
ABB Motors and Mechanical Inc.

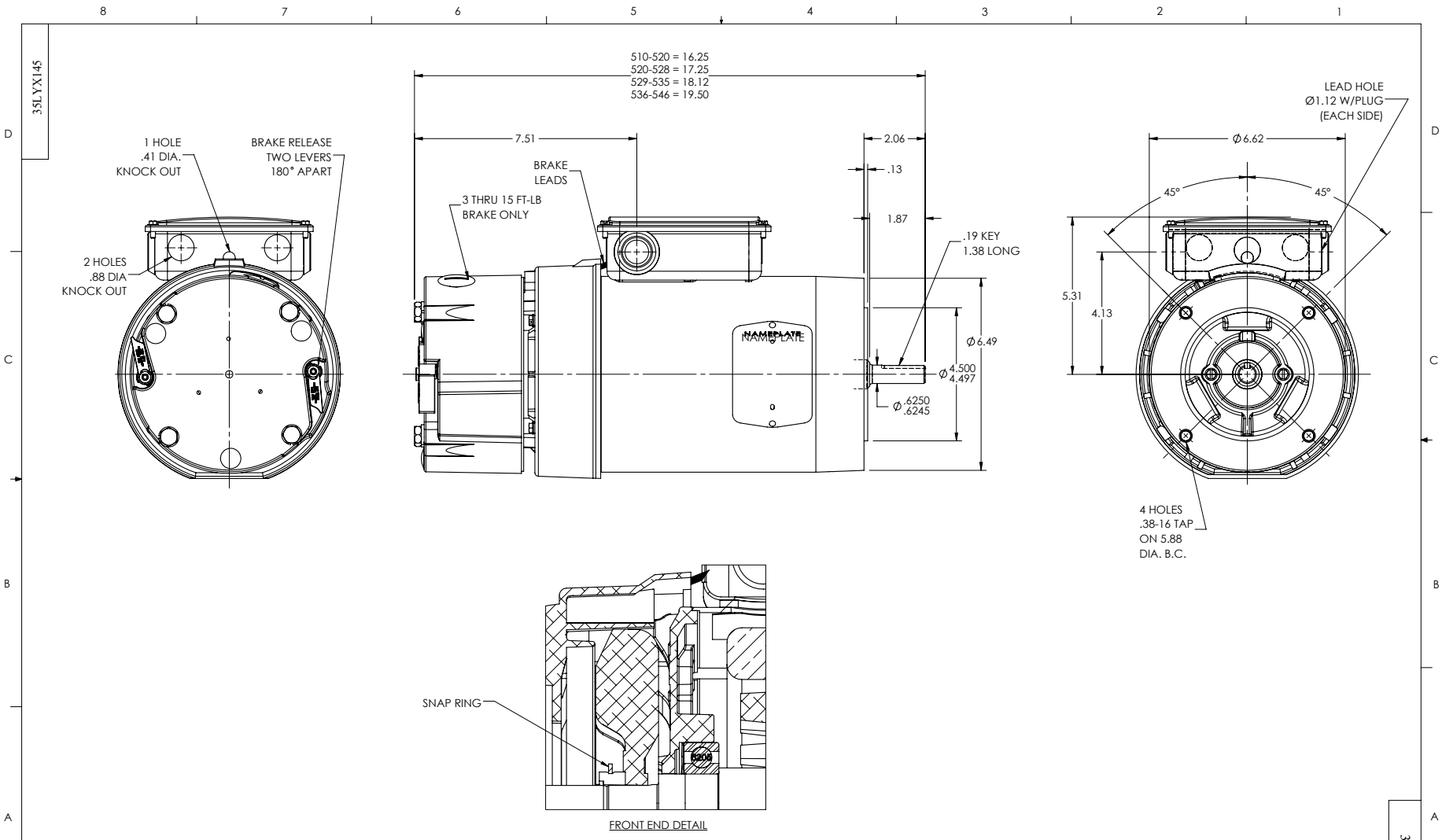
WINDING # 35WGG069

0.5 HP 3 PH 60 HZ 1775 RPM 460 V 3514M

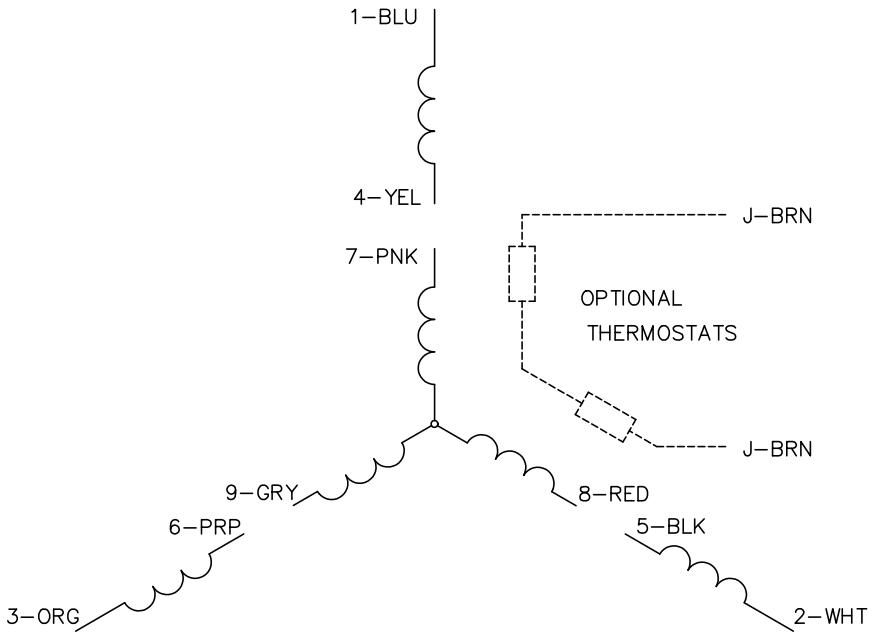
Typical performance - not guaranteed values.

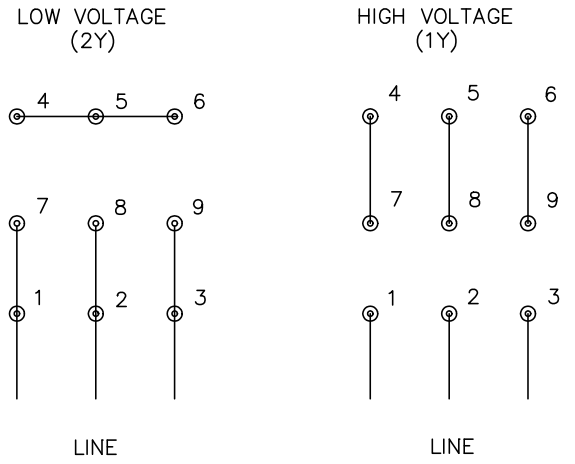
TORQUES(LB-FT): PO=8 PU=4.4 LR=5.1 LRA=8.4




35LYX145
1 HOLE
.41 DIA.
KNOCK OUT
BRAKE RELEASE
TWO LEVERS
180° APART
2 HOLES
.88 DIA
KNOCK OUT
510-520 = 16.25
520-528 = 17.25
529-535 = 18.12
536-546 = 19.50
7.51
2.06
.13
1.87
BRAKE
LEADS
3 THRU 15 FT-LB
BRAKE ONLY
.19 KEY
1.38 LONG
NAMEPLATE
NAME PLATE
Ø6.49
Ø4.500
4.497
Ø.6250
.6245
LEAD HOLE
Ø1.12 W/PLUG
(EACH SIDE)
Ø6.62
45°
45°
5.31
4.13
4 HOLES
.38-16 TAP
ON 5.88
DIA. B.C.
SNAP RING
6209
FRONT END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CHANGE 35GS3009 TO 35GS3023, FIX KOBX MOUNT LOC
REV: F
VERSION: 06
REVISED: 10:48:11 10/20/2023
TDR: 000001211789
MODEL NO. 35LYX145
REF: -
BY: ENFRAJ0
B
BALDOR - RELIANCE®
VERT 56C TEFC M F3 W/DODGE 'D' SERIES BRAKE & 35CB4007
SH 1 of 1
35LYX145

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS

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			BALDOR • DODGE • RELIANCE
REV. LTR: –	VERSION: 00	TDR: 000000741785	
FILE: \CKA\00037\282		REVISED: 12:28:11 04/12/2012	D–SERIES MOTOR BRAKE 5LD AC\DC
MTL: –		BY: CKRONS0	SH 1 of 1