ABB BALDOR RELIANCE

Customer information packet

VEM3161T

3HP, 1760RPM, 3PH, 60HZ, 145TC, 3628M, ODP, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	ODP
Frame	145TC
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	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	NEMA PREMIUM
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	4.300 A @ 460.0 V
	8.500 A @ 208.0 V
	8.600 A @ 230.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	4.3 a

Part Detail

Revision	-
Type	AC
Mech. spec.	36M655
Base	
Status	PRD/A
Elec. spec.	36WGZ649
Layout	36LYM655
Eff. date	11-14-2025
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	11-05-2025

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3628M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.92 IN
Power Factor	78
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	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1760 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

NP3553LUA									
CAT.NO.	VEM3161T								
SPEC.	36M655Z649								
HP	3								
VOLTS	230/460								
AMPS	8.6/4.3								
RPM	1760								
FRAME	145TC	**HZ**	60			**PH**	3		
SF	1.15	**CODE**	K	**DES**	B	**CLASS**	F		
NEMA NOM. EFF	89.5	**PF**	78						
RATING	40C AMB-CONT								
CC	010A								
ENCL	ODP	**SN**							
DE	6306		**ODE**	6205					
VPWM INVERTER READY		SFA 9.6/4.8							
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 3HP 190/380V 8.6/4.3A								SF1.0

Parts List

Part number	Description	Quantity
SA443004	SA 36M655Z649	1.000 ea
RA435500	RA 36M655Z649	1.000 ea
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	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
36EP3204B01	B00 W/DRIP CVR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP3405A21	PUEP OPEN 306 BRG W/BAFF., T'SLV, GRS	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
36AD2000	AIR BAFFLE	1.000 ea
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 ea
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
36FH4012A01	DRIP COVER NOTCH BOTTOM, W/ PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
36CB4516	750LIPPED CB LID - GALVANNEAL	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
HA3101A25	THRUBOLT 1/4-20 X 11.000 OHIO ROD	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP3553LUA	ALUM SUPER-E VPWM INV READY UL CC NEMA P	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

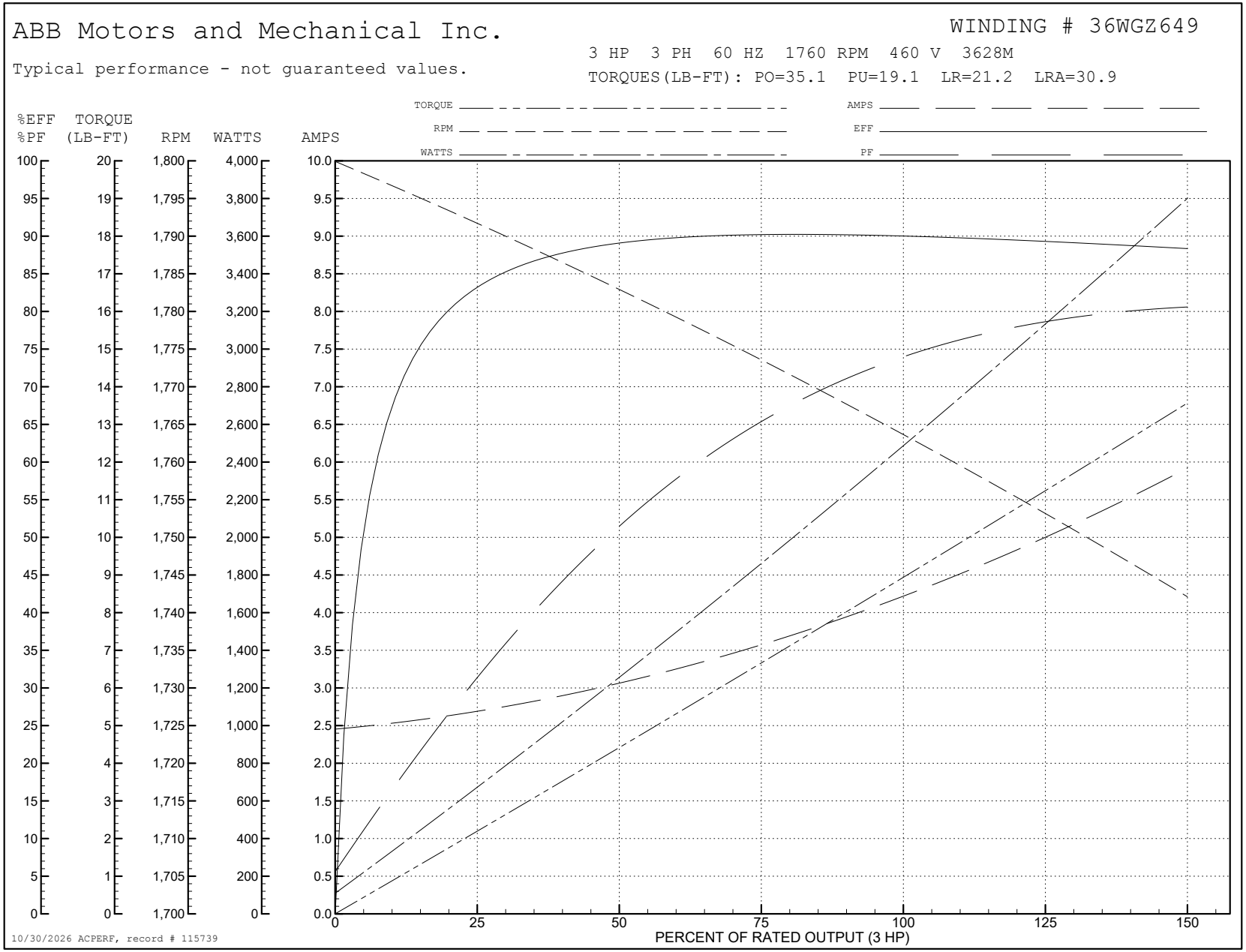
AC Induction Motor Performance Data
Record # 115739
Typical performance - not guaranteed values

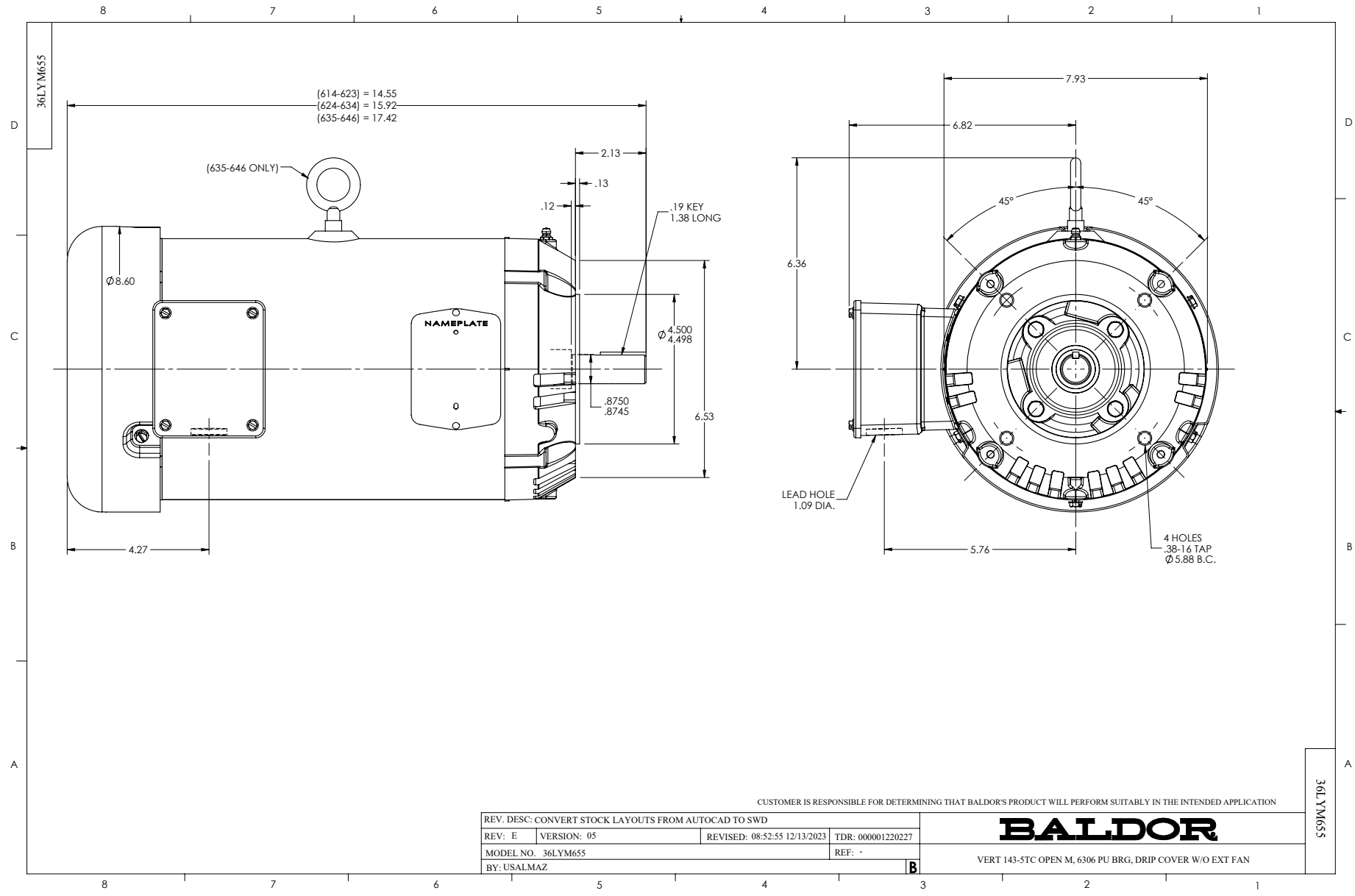
Winding: 36WGZ649-R001	**Type:** 3628M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			3	**Full Load Torque**	8.953 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			8.6/4.3	**Breakdown Torque**	35.1 LB-FT
R.P.M.			1760	**Pull-up Torque**	19.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	21.2 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	30.9 A
Service Factor (S.F.)			1.15	**No-load Current**	2.49 A
NEMA Nom. Eff.	89.5	**Power Factor**	78	**Line-line Res. @ 25ºC**	4.2111 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	25°C
S.F. Amps			9.6/4.8	**Temp. Rise @ S.F. Load**	30°C
				Locked-rotor Power Factor	44.1

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	32	52	66	73	78	81	76
Efficiency	82.9	88.8	90.2	90.1	89.4	88.2	89.7
Speed	1791.6	1783	1773.2	1763.4	1753.4	1742	1757
Line amperes	2.65	3.04	3.59	4.26	5.03	5.89	4.72


ABB Motors and Mechanical Inc.
WINDING # 36WGZ649
Typical performance - not guaranteed values.
3 HP 3 PH 60 HZ 1760 RPM 460 V 3628M
TORQUES(LB-FT): PO=35.1 PU=19.1 LR=21.2 LRA=30.9
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (3 HP)
10/30/2026 ACPERF, record # 115739



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

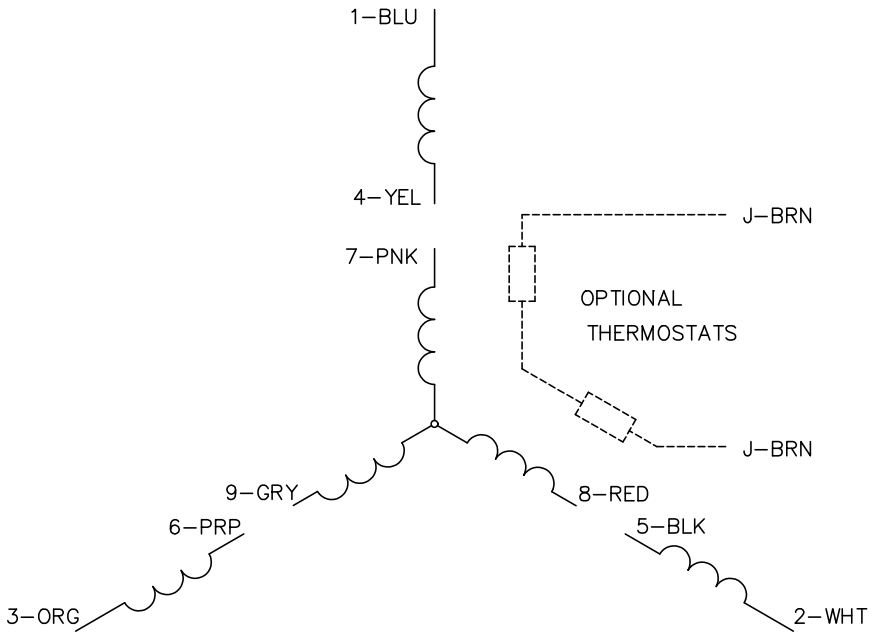
REV. DESC: CONVERT STOCK LAYOUTS FROM AUTOCAD TO SWD			
REV: E	VERSION: 05	REVISED: 08:52:55 12/13/2023	TDR: 000001220227
MODEL NO. 36LYM655			REF: -
BY: USALMAZ			B

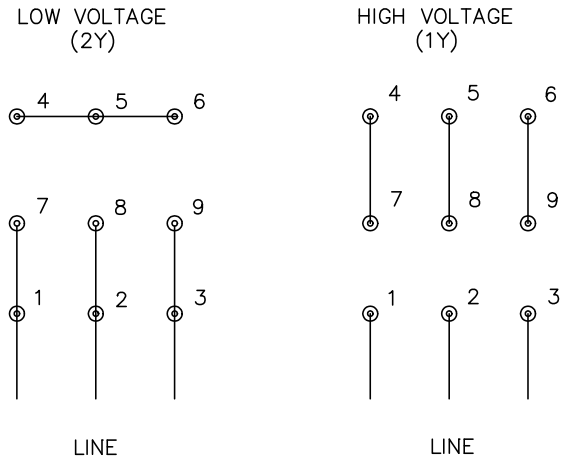
BALDOR

VERT 143-5TC OPEN M, 6306 PU BRG, DRIP COVER W/O EXT FAN

36LYM655

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