ABB BALDOR RELIANCE

Customer information packet

VEM3311T

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 3734M, ODP, F
Class - None
Division - Not Applicable

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Specifications

Enclosure	ODP
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	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	19.600 A @ 230.0 V
	20.600 A @ 208.0 V
	9.800 A @ 460.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	9.8 a

Part Detail

Revision	D
Type	AC
Mech. spec.	37K446
Base	
Status	PRD/A
Elec. spec.	37WGL863
Layout	37LYK446
Eff. date	06-11-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	01-29-2021

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3734M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.91 IN
Power Factor	79
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 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

NP3553LUA										
CAT.NO.	VEM3311T									
SPEC.	37K446L863G1									
HP	7.5									
VOLTS	230/460									
AMPS	19.6/9.8									
RPM	1770									
FRAME	213TC	**HZ**	60			**PH**	3			
SF	1.15	**CODE**	J	**DES**	A	**CLASS**	F			
NEMA NOM. EFF	91	**PF**	79							
RATING	40C AMB-CONT									
CC	010A									
ENCL	ODP	**SN**								
DE	6307	**ODE**	6206							
VPWM INVERTER READY										
CT30-60(2:1) VT3-60(20:1)										
USABLE AT	50HZ 7.5HP 190/380V 23.2/11.6A									SF1.0

Parts List

Part number	Description	Quantity
SA390855	SA 37K446L863G1	1.000 ea
RA381323	RA 37K446L863G1	1.000 ea
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
37CB3006	37 CB CASTING W/1.38 LEAD HOLE @ 6:00	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
37EP3203A01	A00 W/FH MTG	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP3400A02	FACE MT EP-OPEN-307 BRG-213-215TC W/BAFF	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
37AD2000A01	BAFFLE PLATE, STAMPED PLATED	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
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
37FH4000A05SP	DRIP COVER, W/ PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
37CB4516	LIPPED LID FOR 37 FRAME NEC KOBX	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	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*	0.028 ga
HA3104A14	THRUBOLT- 5/16-18 X12.125(OHIO)	4.000 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
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data
Record # 85452
Preliminary Data Sheet

Winding: 37WGL863-R001	**Type:** 3734M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			7.5	**Full Load Torque**	22.2 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			19.6/9.8	**Breakdown Torque**	74.8 LB-FT
R.P.M.			1770	**Pull-up Torque**	37.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	45.4 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	72 A
Service Factor (S.F.)			1.15	**No-load Current**	4.87 A
NEMA Nom. Eff.	91	**Power Factor**	79	**Line-line Res. @ 25ºC**	1.67 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	35°C
S.F. Amps			22.0/11.0	**Temp. Rise @ S.F. Load**	47°C
				Locked-rotor Power Factor	45.8
				Rotor inertia	0.836 lb-ft²

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	39	60	73	79	82	83	81
Efficiency	85	90.1	91.1	90.9	90.1	89	90.3
Speed	1793	1786	1779	1772	1764	1755	1766
Line amperes	5.34	6.47	7.99	9.87	11.9	14.2	11.1

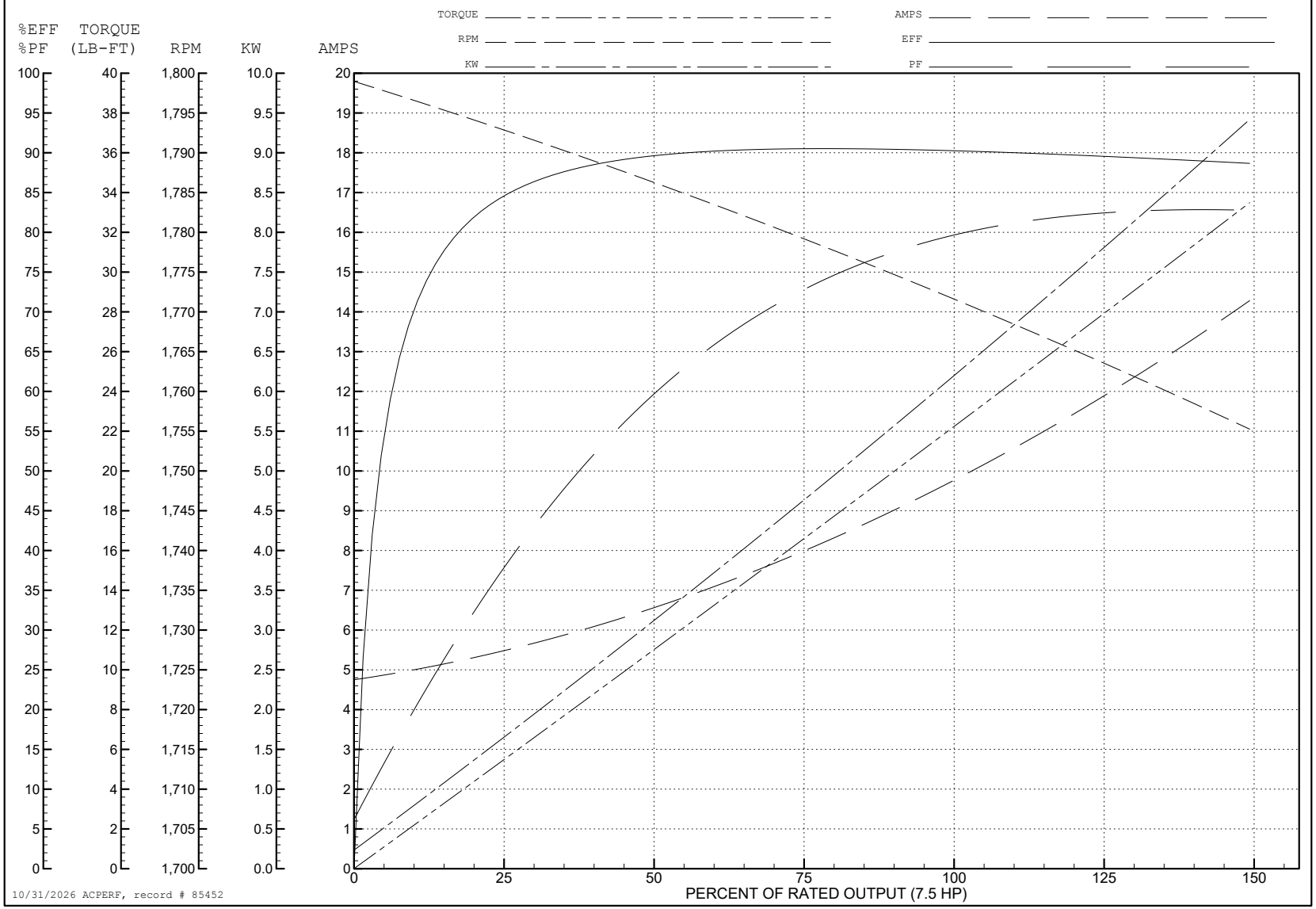
ABB Motors and Mechanical Inc.

WINDING # 37WGL863

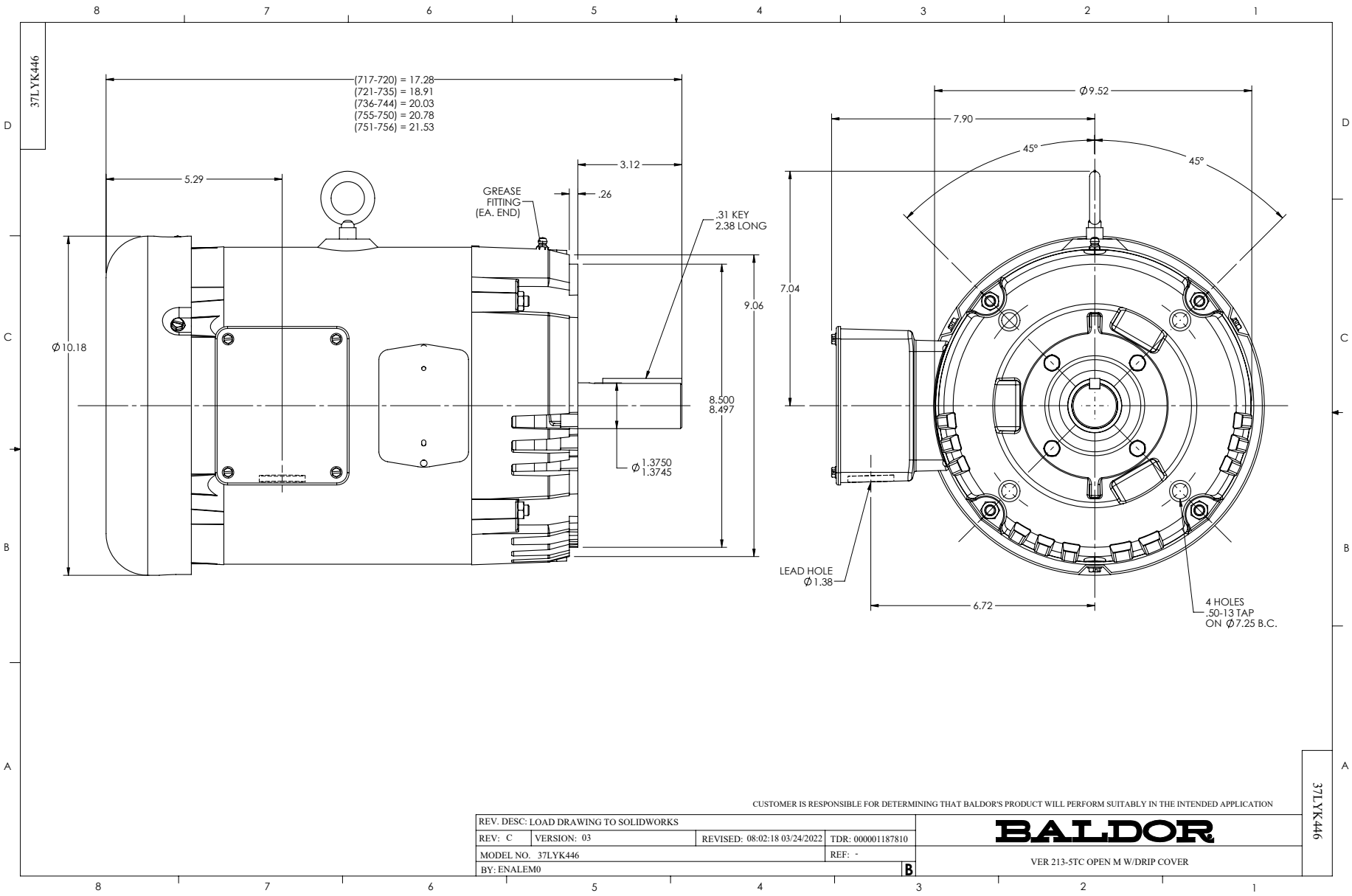
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3734M

Typical performance - not guaranteed values.

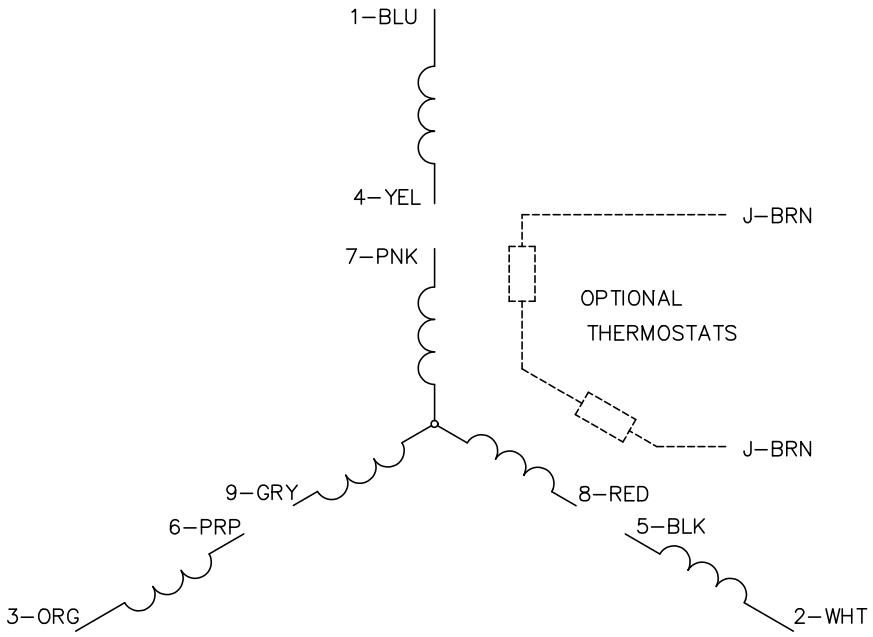
TORQUES(LB-FT): PO=74.8 PU=37.1 LR=45.4 LRA=72

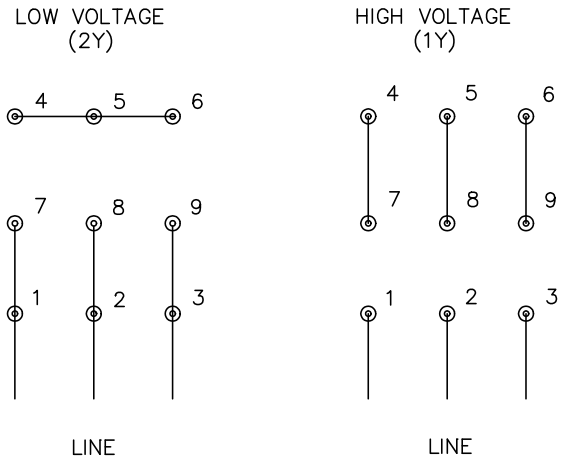


10/31/2026 ACPERF, record # 85452


37LYK446
(717-720) = 17.28
(721-735) = 18.91
(736-744) = 20.03
(755-750) = 20.78
(751-756) = 21.53
5.29
3.12
.26
GREASE FITTING (EA. END)
.31 KEY 2.38 LONG
Ø10.18
9.06
8.500
8.497
Ø1.3750
1.3745
Ø9.52
7.90
45°
45°
7.04
LEAD HOLE Ø1.38
6.72
4 HOLES .50-13 TAP ON Ø7.25 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: C
VERSION: 03
REVISED: 08:02:18 03/24/2022
TDR: 000001187810
MODEL NO. 37LYK446
REF: -
BY: ENALEM0
B
BALDOR
VER 213-5TC OPEN M W/DRIP COVER
37LYK446

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