Customer information packet

VEM3615T

5HP, 1755RPM, 3PH, 60HZ, 184TC, 3642M, TEFC, F1
MDS OF MICHIGAN INC
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.
10/23/2024 1:26:46 PM

Specifications

Enclosure	TEFC
Frame	184TC
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	5.000 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	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	6.700 A @ 460.0 V 14.000 A @ 208.0 V 13.400 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part detail

Revision	E
Type	AC
Mech. spec.	36A003
Base	
Status	PRD/A
Elec. spec.	36WGQ032
Layout	36LYA003
Eff. date	06-11-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	12-03-2020

Heater Indicator	No Heater
High Voltage Full Load Amps	6.7 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard 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	3642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.04 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	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1755 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

NP3441LUA										
CAT.NO.	VEM3615T									
SPEC	36A003Q032G2									
HP	5									
VOLTS	230/460									
AMPS	13.4/6.7									
RPM	1755									
FRAME	184TC		**HZ**	60			**PH**	3		
SF	1.15	**CODE**	J	**DES**	B	**CLASS**		F		
NEMA NOM. EFF	89.5	**PF**	78							
RATING	40C AMB-CONT									
CC	010A									
ENCL	TEFC	**SER**								
DE	6206		**ODE**	6205						
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1										
	50HZ 5HP 190/380V 15.6/7.8A									SF1.0

Parts list

Part number	Description	Quantity
SA388436	SA 36A003Q032G2	1.000 ea
RA378797	RA 36A003Q032G2	1.000 ea
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 ea
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	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
36EP3104A01	FREP MACH ASSEMBLY FOR ROUTING	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP3301A23	PUEP ASSEMBLY FOR ROUTING PURPOSES	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 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
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
36FH4009A102	IEC FH GREASER PRIMED	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
37GS1001	GASKET, CONDUIT BOX LID, .06 THICK LEXID	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501E16	KEY, 1/4 SQ X 1.750	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
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3101A28	THRUBOLT 1/4-20 X 12.500 OHIO ROD	4.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.022 ga
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A06	1.000 ea

PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data
Record # 89917
Typical performance - not guaranteed values

Winding: 36WGQ032-R001	**Type:** 3642M	**Enclosure:** TEFC

Nameplate Data			
Rated Output (HP)			5
Volts			230/460
Full Load Amps			13.4/6.7
R.P.M.			1755
Hz	60	**Phase**	3
NEMA Design Code	B	**KVA Code**	J
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	89.5	**Power Factor**	78
Rating - Duty			40C AMB-CONT
S.F. Amps			

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	15 LB-FT
Start Configuration	direct on line
Breakdown Torque	53.1 LB-FT
Pull-up Torque	23.4 LB-FT
Locked-rotor Torque	34.7 LB-FT
Starting Current	49.8 A
No-load Current	3.31 A
Line-line Res. @ 25ºC	2.4 Ω
Temp. Rise @ Rated Load	71°C
Temp. Rise @ S.F. Load	86°C
Locked-rotor Power Factor	40.6635
Rotor inertia	0.391 lb-ft²

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	38	60	72	79	82	84	81
Efficiency	83.8	88.9	89.8	89.5	88.4	86.8	88.8
Speed	1789	1778	1766	1753	1738	1722	1744
Line amperes	3.64	4.39	5.45	6.66	8.08	9.67	7.51

ABB Motors and Mechanical Inc.

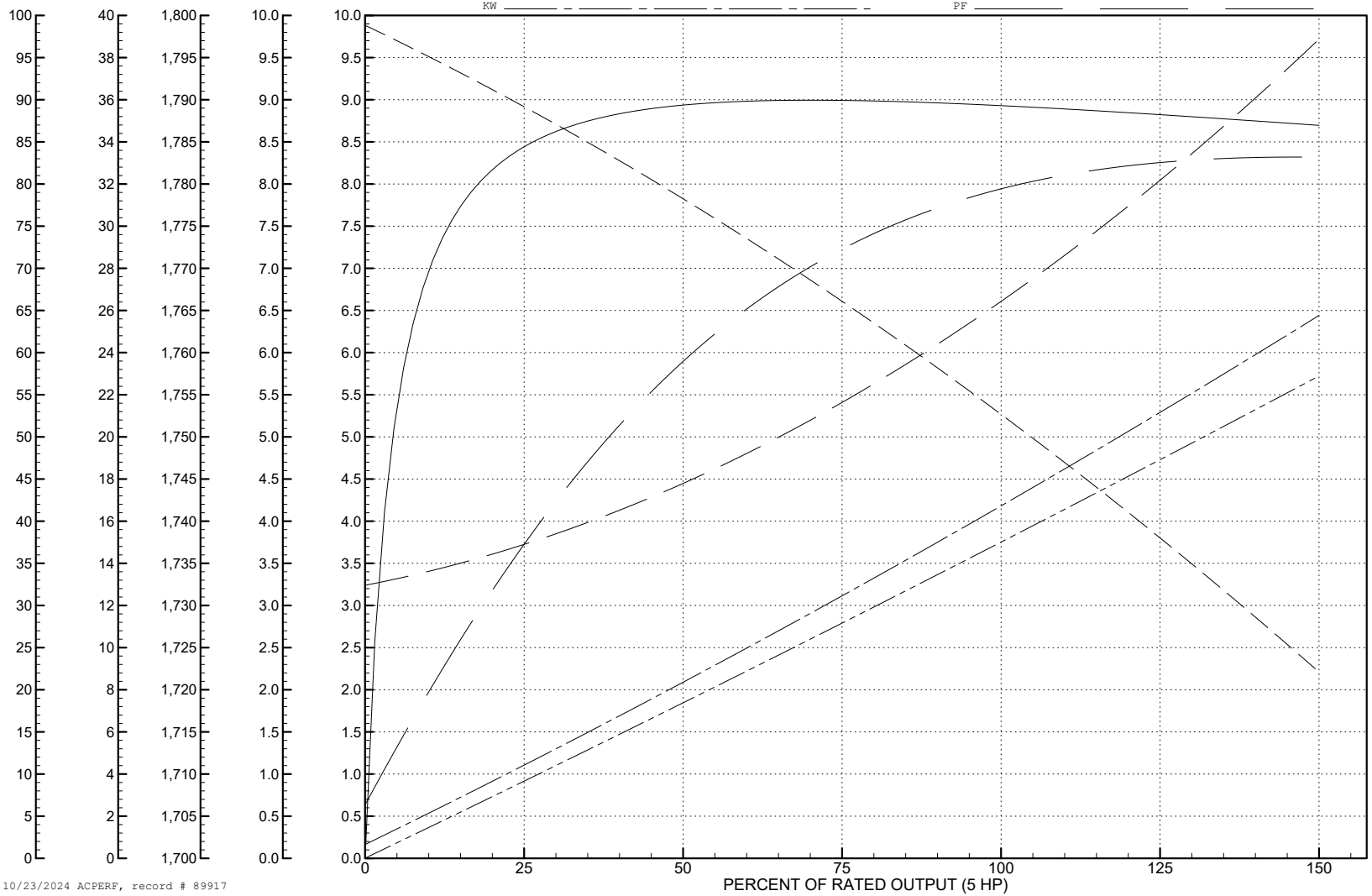
WINDING # 36WGQ032

Typical performance - not guaranteed values.

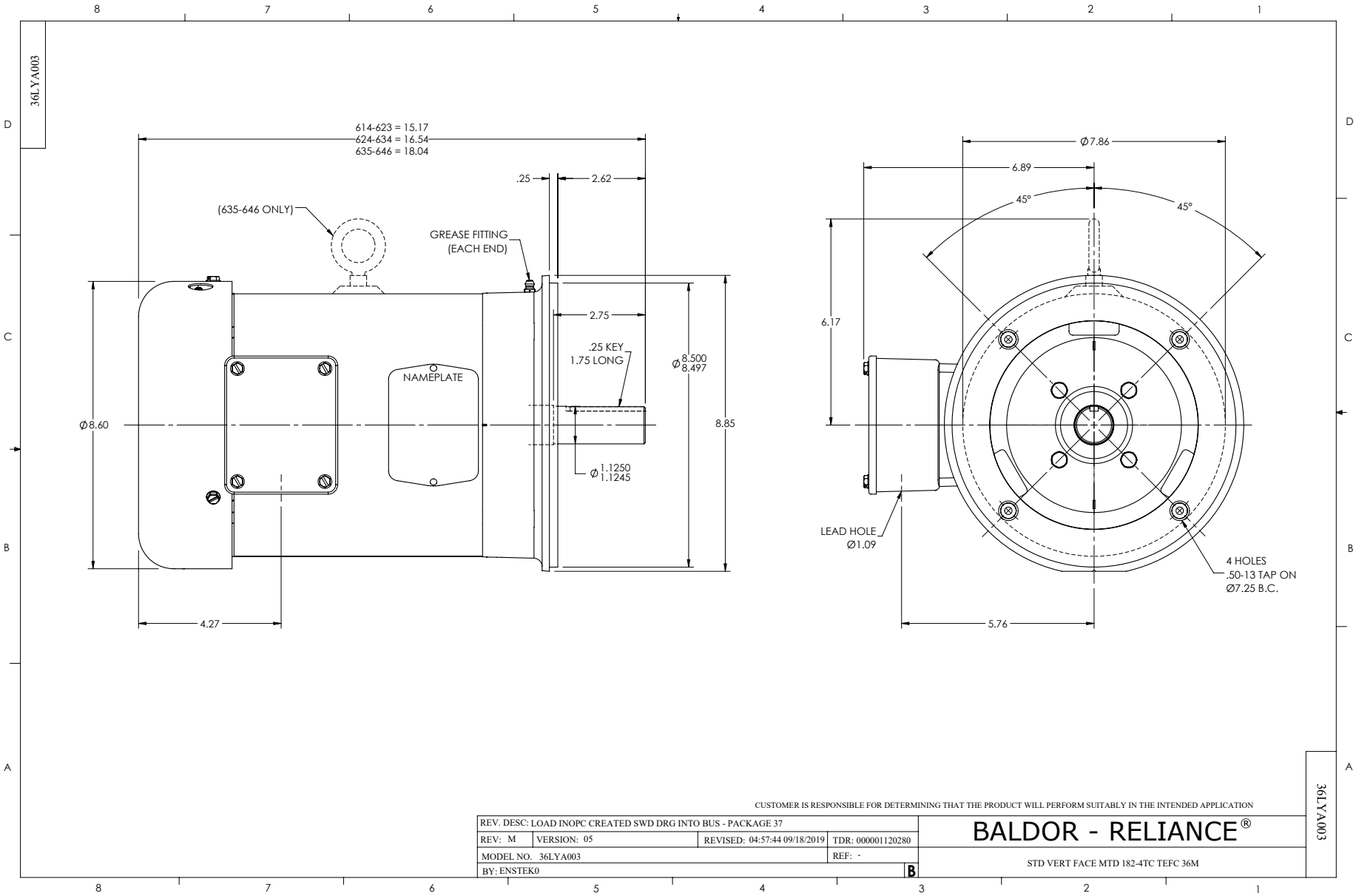
5 HP 3 PH 60 HZ 1755 RPM 460 V 3642M

TORQUES(LB-FT): PO=53.1 PU=23.4 LR=34.7 LRA=49.8

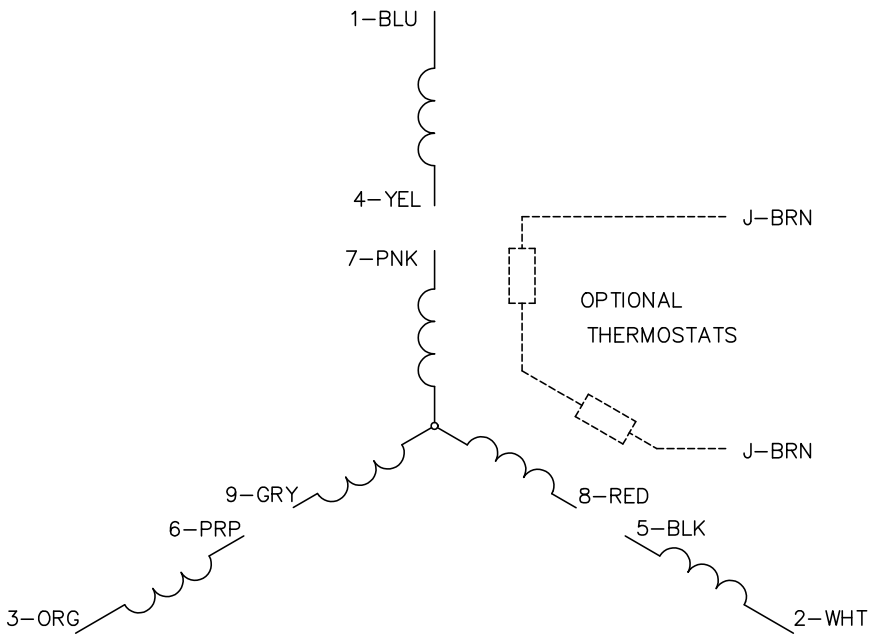
TORQUE						AMPS					
RPM						EFF					
KW						PF					

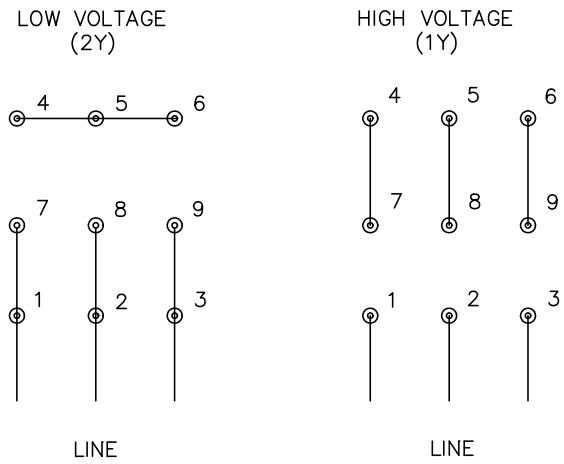


10/23/2024 ACPERF, record # 89917


36LYA003
614-623 = 15.17
624-634 = 16.54
635-646 = 18.04
.25
2.62
(635-646 ONLY)
GREASE FITTING
(EACH END)
2.75
.25 KEY
1.75 LONG
Ø 8.500
8.497
NAMEPLATE
Ø8.60
8.85
Ø 1.1250
1.1245
4.27
Ø7.86
6.89
45°
45°
6.17
LEAD HOLE
Ø1.09
4 HOLES
.50-13 TAP ON
Ø7.25 B.C.
5.76
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD INOPC CREATED SWD DRG INTO BUS - PACKAGE 37
REV: M
VERSION: 05
REVISED: 04:57:44 09/18/2019
TDR: 000001120280
MODEL NO. 36LYA003
REF: -
BY: ENSTEK0
B
BALDOR - RELIANCE®
STD VERT FACE MTD 182-4TC TEFC 36M
36LYA003

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			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS