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# Customer information packet

## VEM3613T-5

5HP, 3450RPM, 3PH, 60HZ, 184TC, 3630M, TEFC, F1

Class - None

Division - Not Applicable

## 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	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA EEV CURUSEEV 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	4.700 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

## Part detail

Revision	Q
Type	AC
Mech. spec.	36A003
Base	
Status	PRD/A
Elec. spec.	36WGS505
Layout	36LYA003
Eff. date	06-11-2024
CD Diagram	CD0006
Poles	02
Leads	3#16
Proprietary	False
Created date	04-30-2010

High Voltage Full Load Amps	4.7 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3630M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	16.54 IN
Power Factor	91
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 Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 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**

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**Nameplate****NP3441L**

<b>CAT.NO.</b>	VEM3613T-5						
<b>SPEC.</b>	36A003S505G1						
<b>HP</b>	5						
<b>VOLTS</b>	575						
<b>AMP</b>	4.7						
<b>RPM</b>	3450						
<b>FRAME</b>	184TC		<b>HZ</b>	60		<b>PH</b>	3
<b>SER.F.</b>	1.15	<b>CODE</b>	L	<b>DES</b>	A	<b>CL</b>	F
<b>NEMA-NOM-EFF</b>	88.5	<b>PF</b>	91				
<b>RATING</b>	40C AMB-CONT						
<b>CC</b>	010A						
<b>DE</b>	6206		<b>ODE</b>	6205			
<b>ENCL</b>	TEFC	<b>SN</b>					

**VPWM INVERTER READY****CT6-60H(10:1)VT3-60H(20:1)**

## Parts list

Part number	Description	Quantity
SA194227	SA 36A003S505G1	1.000 ea
RA181815	RA 36A003S505G1	1.000 ea
34FN3002B02	EXTERNAL FAN, PLASTIC, .905/.907 HUB W/	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
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.022 ga
HA3101A25	THRUBOLT 1/4-20 X 11.000 OHIO ROD	4.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL EEV	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A06	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea

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

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**AC Induction Motor Performance Data**

Record # 31109

Typical performance - not guaranteed values

<b>Winding: 36WGS505-R001</b>		<b>Type: 3630M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	5	<b>Full Load Torque</b>	7.64 LB-FT		
<b>Volts</b>	575	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	4.7	<b>Breakdown Torque</b>	33.7 LB-FT		
<b>R.P.M.</b>	3450	<b>Pull-up Torque</b>	23.5 LB-FT		
<b>Hz</b>	60	<b>Locked-rotor Torque</b>	27.5 LB-FT		
<b>NEMA Design Code</b>	A	<b>Starting Current</b>	45.7 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	1.34 A		
<b>NEMA Nom. Eff.</b>	88.5	<b>Line-line Res. @ 25°C</b>	3.57 Ω		
<b>Rating - Duty</b>	40C	<b>Temp. Rise @ Rated Load</b>	72°C		
<b>S.F. Amps</b>	AMB-CONT	<b>Temp. Rise @ S.F. Load</b>	88°C		
		<b>Locked-rotor Power Factor</b>	45		
		<b>Rotor inertia</b>	0.134 LB-FT <sup>2</sup>		

**Load Characteristics 575 V, 60 Hz, 5 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	63	81	88	91	93	93	92
<b>Efficiency</b>	83.2	88.4	89.1	88.5	87	85.7	87.5
<b>Speed</b>	3569	3537	3504	3466	3428	3385	3443
<b>Line amperes</b>	1.79	2.61	3.58	4.68	5.81	7.05	5.36



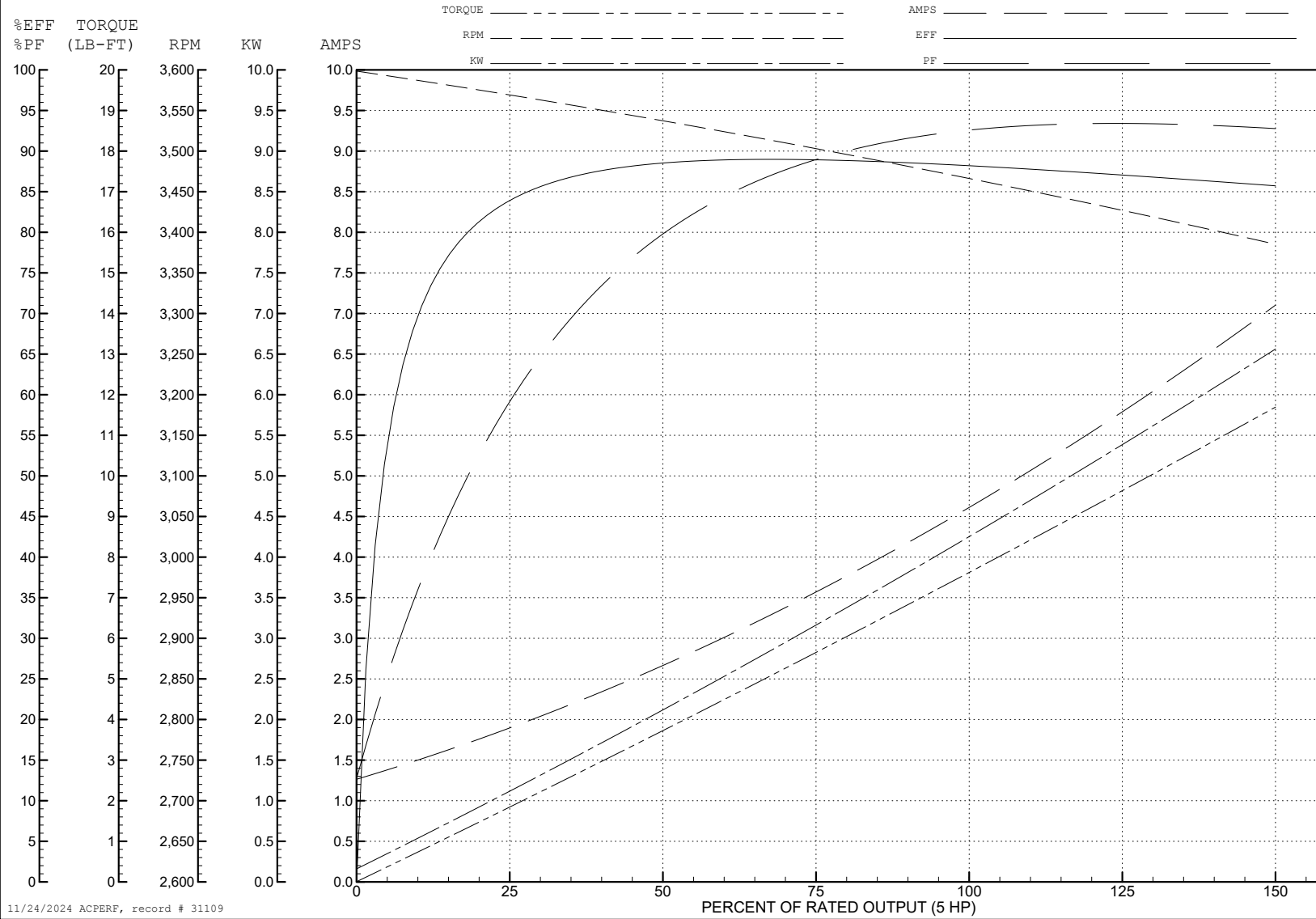
ABB Motors and Mechanical Inc.

WINDING # 36WGS505

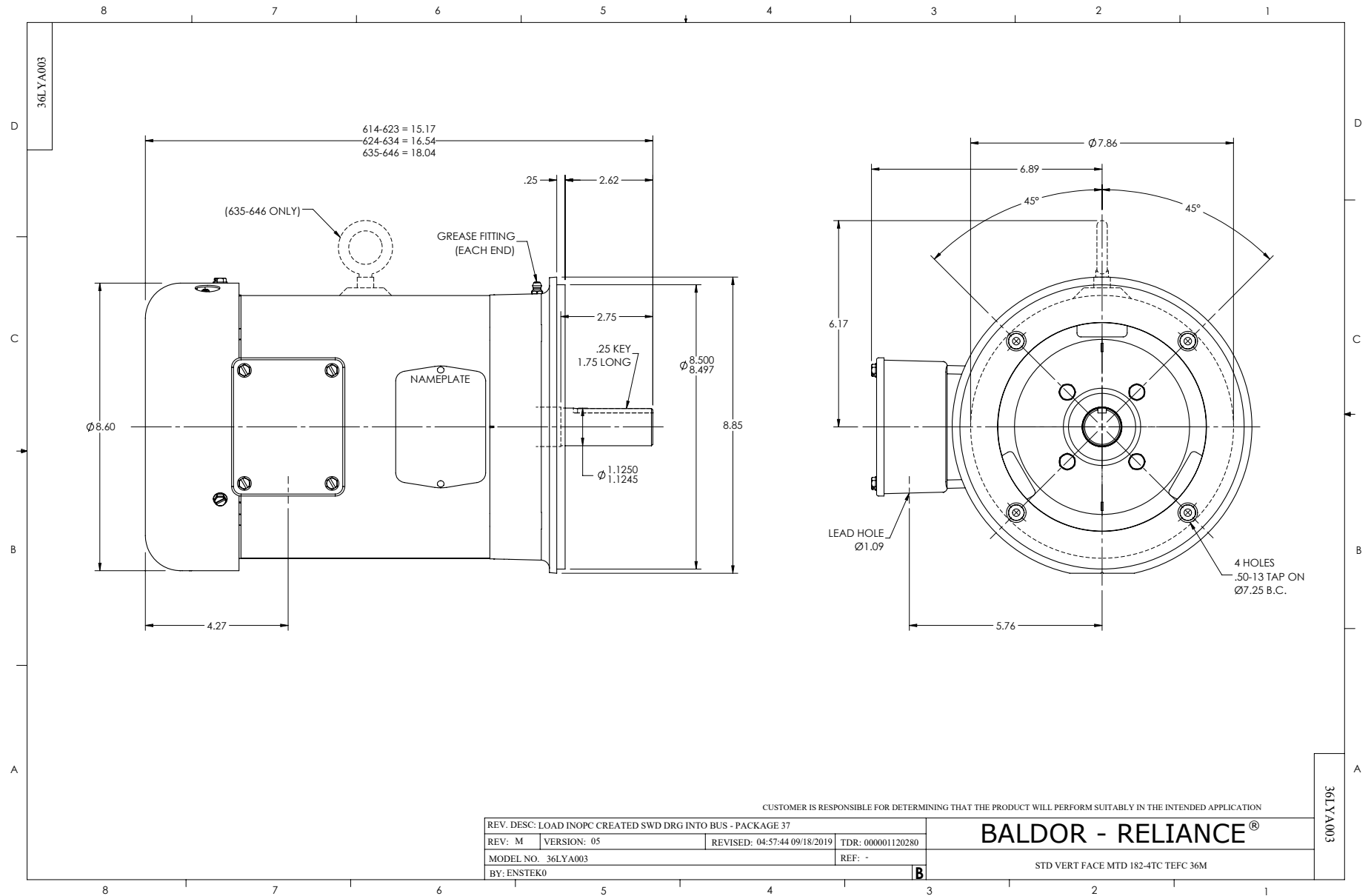
5 HP 3 PH 60 HZ 3450 RPM 575 V 3630M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=33.7 PU=23.5 LR=27.5 LRA=45.7



11/24/2024 ACPERF, record # 31109



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

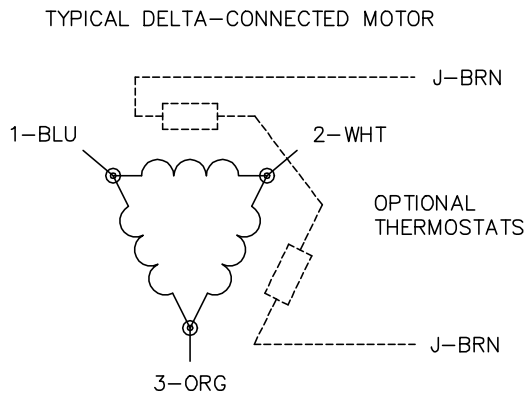
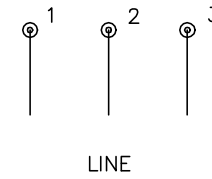
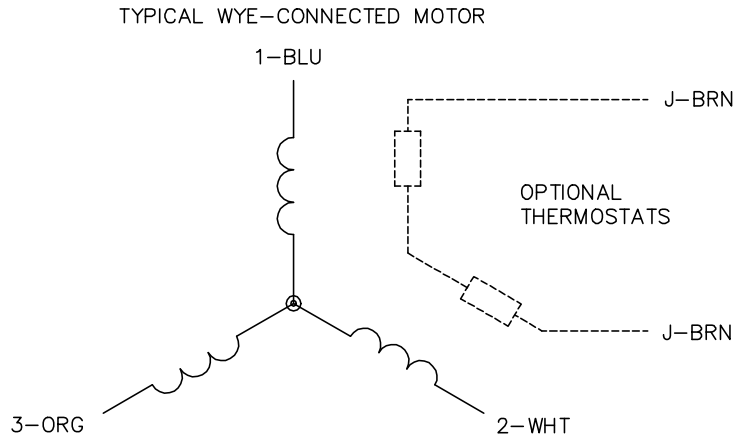
REV. DESC: LOAD INOPC CREATED SWD DRG INTO BUS - PACKAGE 37			
REV: M	VERSION: 05	REVISED: 04:57:44 09/18/2019	TDR: 000001120280
MODEL NO. 36LYA003		REF: -	
BY: ENSTEKO			

**BALDOR - RELIANCE**®

STD VERT FACE MTD 182-4TC TEFC 36M

36LYA003

CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1