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# Customer information packet

## VEM3708T

5HP, 1165RPM, 3PH, 60HZ, 215TC, 3752M, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	215TC
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	1200 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	7.200 A @ 460.0 V 15.600 A @ 208.0 V 14.400 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

## Part detail

Revision	L
Type	AC
Mech. spec.	37A003
Base	
Status	PRD/A
Elec. spec.	37WGQ067
Layout	37LYA003
Eff. date	06-07-2024
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	09-21-2017

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.2 a
Insulation Class	H
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3752M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	21.25 IN
Power Factor	71
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1165 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None

<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

**NP3441LUA**

<b>CAT.NO.</b>	VEM3708T						
<b>SPEC</b>	37A003Q067G1						
<b>HP</b>	5						
<b>VOLTS</b>	230/460						
<b>AMPS</b>	14.4/7.2						
<b>RPM</b>	1165						
<b>FRAME</b>	215TC	<b>HZ</b>	60	<b>PH</b>	3		
<b>SF</b>	1.15	<b>CODE</b>	K	<b>DES</b>	A	<b>CLASS</b>	H
<b>NEMA NOM. EFF</b>	89.5	<b>PF</b>	71				
<b>RATING</b>	40C AMB-CONT						
<b>CC</b>	010A						
<b>ENCL</b>	TEFC	<b>SER</b>					
<b>DE</b>	6307	<b>ODE</b>	6206				
<b>VPWM INVERTER READY</b>	SFA 16.6/8.3						
<b>CT6-60H(10:1)VT3-60H(20:1)</b>	50HZ 5HP 190/380V 17.4/8.7A						SF1.0

## Parts list

Part number	Description	Quantity
SA345319	SA 37A003Q067G1	1.000 ea
RA333795	RA 37A003Q067G1	1.000 ea
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	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
37GS1000SP	GASKET, CONDUIT BOX STD., .06 THICK LEXI	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
37EP3101A01	FR ENDPLATE, FOR ROUTING PURPOSES	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP3300A01	PUEP ASSEMBLY FOR ROUTING	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
10XN2520A30	HEX HD CAP SCREW-STD THD-.25 X 20 THD PE	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
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
07FH4007SP	PRIMED	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
37GS1008	37 GS FOR CB LID - LEXIDE	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 *** NLA IN 5 GALLON	0.028 ga
HA3104A25	THRUBOLT .31-18 X 14.75	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
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea

37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 ea
PK3082	STYROFOAM CRADLE	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea

**AC Induction Motor Performance Data**

Record # 87458

Typical performance - not guaranteed values

<b>Winding: 37WGQ067-R002</b>		<b>Type: 3752M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	5		<b>Full Load Torque</b>	22.48 LB-FT	
<b>Volts</b>	230/460		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	14.4/7.2		<b>Breakdown Torque</b>	80.1 LB-FT	
<b>R.P.M.</b>	1165		<b>Pull-up Torque</b>	51.2 LB-FT	
<b>Hz</b>	60	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	55.8 LB-FT
<b>NEMA Design Code</b>	A	<b>KVA Code</b>	K	<b>Starting Current</b>	54.4 A
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	3.98 A	
<b>NEMA Nom. Eff.</b>	89.5	<b>Power Factor</b>	71	<b>Line-line Res. @ 25°C</b>	1.65 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	59°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	72°C	
			<b>Locked-rotor Power Factor</b>	21.9	
			<b>Rotor inertia</b>	1.29 lb-ft <sup>2</sup>	

**Load Characteristics 460 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>	33	52	64	70	74	76	72
<b>Efficiency</b>	84.4	89.3	90.2	89.7	88.6	87	89
<b>Speed</b>	1192	1183	1175	1165	1154	1141	1158
<b>Line amperes</b>	4.28	5.07	6.08	7.39	8.87	10.6	8.28



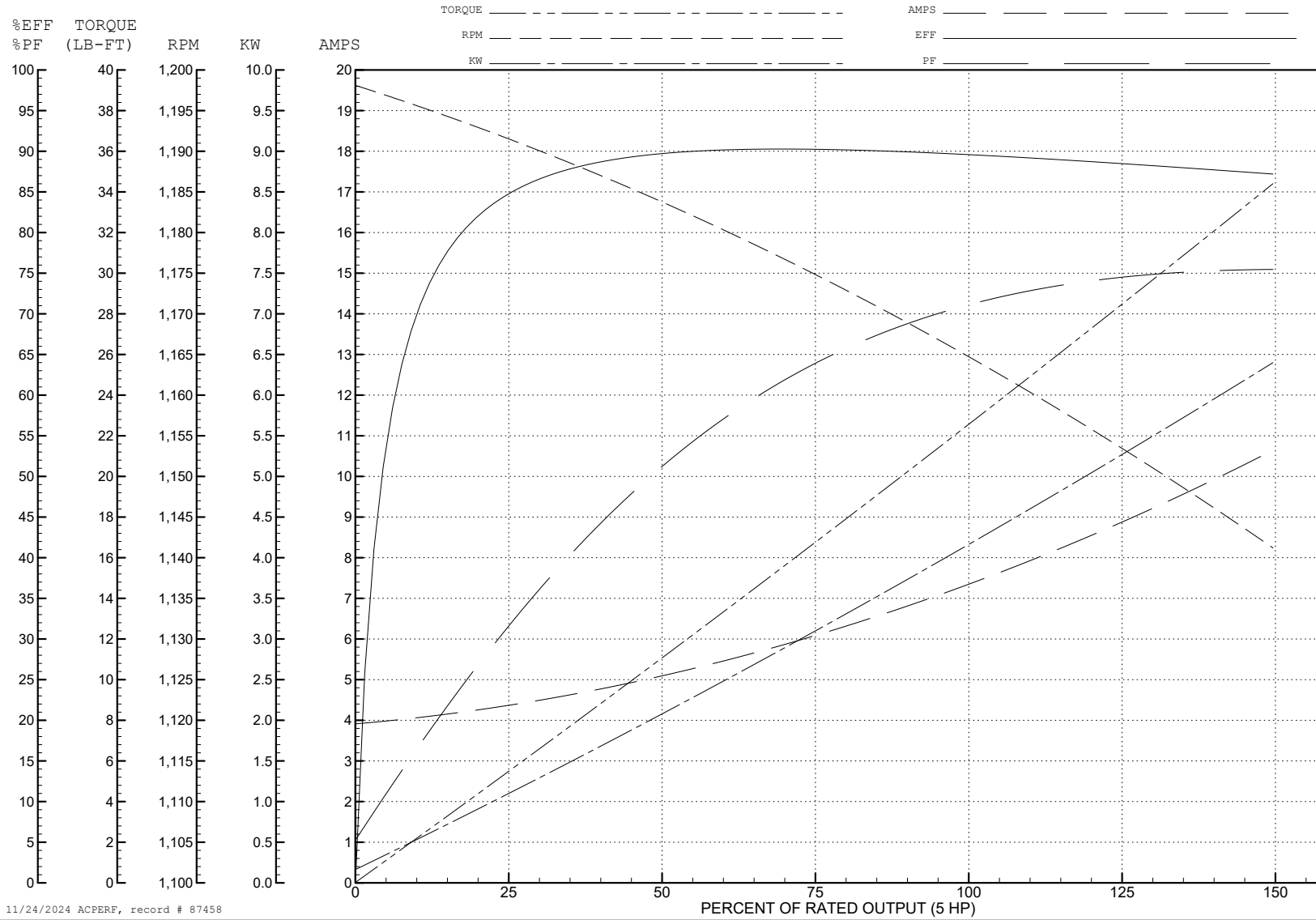
ABB Motors and Mechanical Inc.

WINDING # 37WGQ067

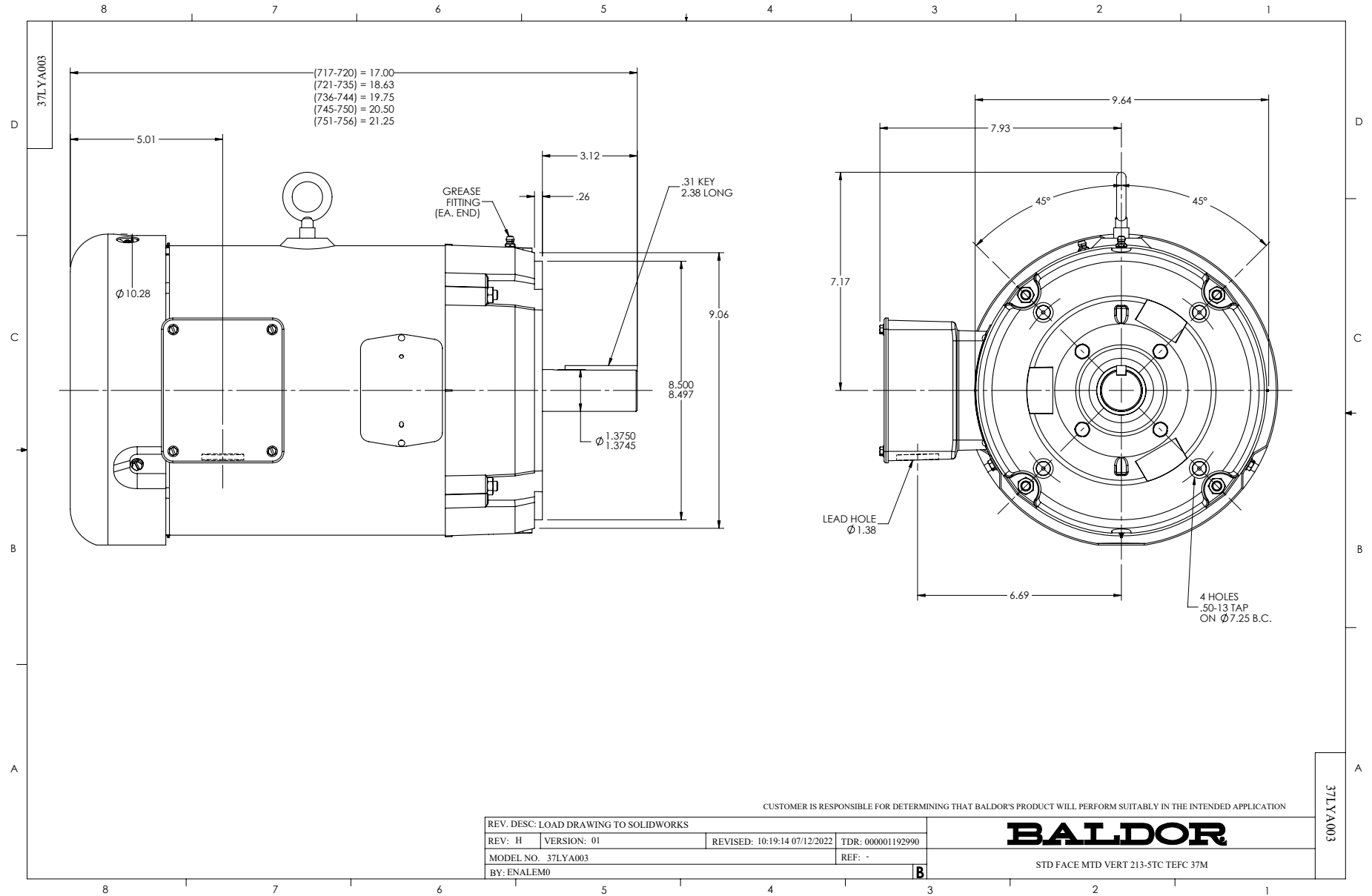
Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1165 RPM 460 V 3752M

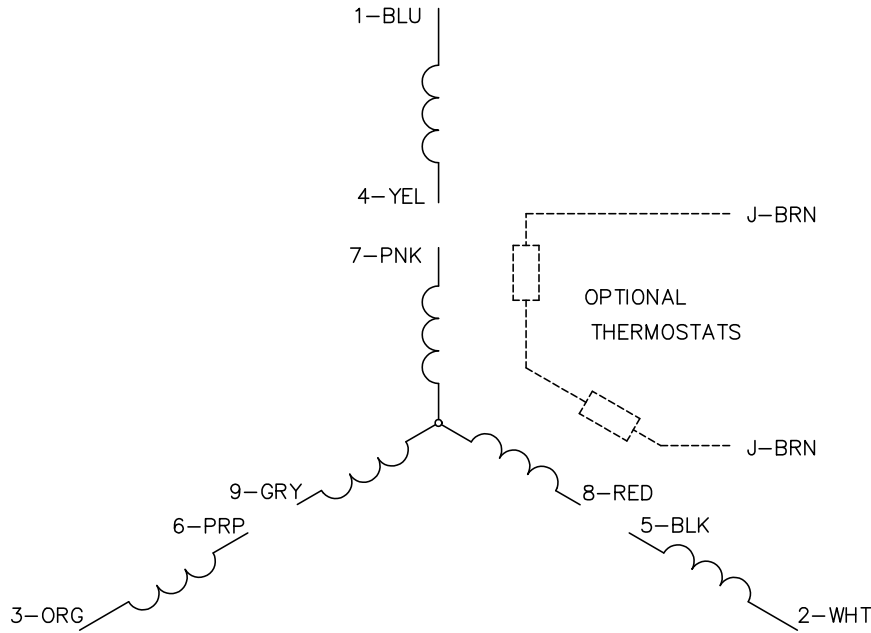
TORQUES (LB-FT): PO=80.1 PU=51.2 LR=55.8 LRA=54.4



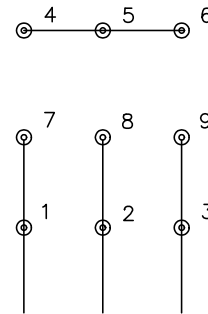
11/24/2024 ACPERF, record # 87458



CD0005

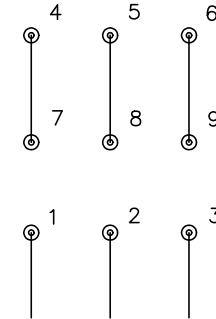


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS