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# Customer information packet

## VFSWDM3651T-E

3HP, 1760RPM, 3PH, 60HZ, 145TC, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	145TC
Frame Material	Stainless Steel
Frequency	60.00 Hz
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
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA UR NEMA PREMIUM
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	8.400 A @ 230.0 V 4.200 A @ 460.0 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
Heater Indicator	No Heater
High Voltage Full Load Amps	4.2 a
Insulation Class	H

## Part detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGS987
Layout	36LY-000-047
Eff. date	02-09-2023
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	05-23-2019

Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3636M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.60 IN
Power Factor	76
Product Family	WD All SS Encapsulated
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
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**

<b>NP1953N01</b>										
<b>CAT.NO.</b>	VFSWDM3651T-E									
<b>SPEC.</b>	36-0000-0048									
<b>HP</b>	3									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	8.4/4.2									
<b>R.P.M.</b>	1760									
<b>FRAME</b>	145TC	<b>HZ</b>	60	<b>PH</b>	3					
<b>SER.F.</b>	1.15	<b>CODE</b>	K	<b>DES.</b>	B	<b>CLASS</b>	H			
<b>NEMA NOM. EFF.</b>	89.5	<b>P.F.</b>	76							
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A	<b>USABLE AT 208V</b>	N/A							
<b>DE</b>	6207	<b>ODE</b>	6206							
<b>ENCL</b>	TEFC	<b>SN</b>								
	4:1 CT, 10:1 VT									

## Parts list

Part number	Description	Quantity
SA370016	SA 36-0000-0048	1.000 ea
RA359641	RA 36-0000-0048	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2100bx)4/22	1.000 ea
36FH4007	FAN COVER #304 STAINLESS W/OUT GREASER	1.000 ea
10XN1032FS06	HEX HD CAP SCREW 10-32 X 3/8 SS FOOD SAF	3.000 ea
36FN3000A01SP	EXFN, PLASTIC, 7.00 OD, .912 ID	1.000 ea
11XB1214S16	12-14X1.00 HXWSSLD TYP B STAINLESS	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3101FS29	THRUBOLT, 1/4-20 X 13.000 SS FOOD SAFE	4.000 ea
RM1070A14	O-RING, -010 VITON/FKM .070CS X .239ID	4.000 ea
35CB1017A02	5/36 MID SECT - 3 PC. CONDUIT BOX 3/4 N	1.000 ea
HA3424S48	STUD - M6X1.0 THDS X 3.00"	1.000 ea
36EP1920A02	FREP TEFC 206 BRG WD11/12 (STAINLESS)	1.000 ea
HW4600F25	30 X 48 X 4.5 AFX SEAL, GRAPHITE INFUSED	1.000 ea
HW4600G02	30 X 47 X 8 LIP SEAL, GRAPHITE INFUSED V	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
RM1070A42	O-RING,(#70-7.239) VITON .070X7.239	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
36EP1926A02	PUEP 182-4C ENCL 207 BRG WD11/12 (STAINL	1.000 ea
HW4600F79	35 X 52 X 4.5 AFS SEAL, GRAPHITE INFUSED	1.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
HW4600F35	35 X 52 X 8 LIP SEAL, GRAPHITE INFUSED V	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
RM1070A42	O-RING,(#70-7.239) VITON .070X7.239	1.000 ea
RM1070A81	O-RING, -043 VITON/FKM .070CS X 3.489ID	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35CB1513A01	35-36-37 MACH. LID - 3 PC. CONDUIT BOX	1.000 ea
RM1070A81	O-RING, -043 VITON/FKM .070CS X 3.489ID	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
GOPA1000	PKG GRP, PRINT PK1026A06	1.000 ea

HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
FE-0000016	ZTRG FE ASSEMBLY	1.000 ea
PE-0000016	ZRTG PE ASSEMBLY	1.000 ea

**AC Induction Motor Performance Data**

Record # 39149

Typical performance - not guaranteed values

<b>Winding: 36WGS987-R001</b>		<b>Type: 3636M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>		3	<b>Full Load Torque</b>		9.04 LB-FT
<b>Volts</b>		230/460	<b>Start Configuration</b>		direct on line
<b>Full Load Amps</b>		8.4/4.2	<b>Breakdown Torque</b>		34.81 LB-FT
<b>R.P.M.</b>		1760	<b>Pull-up Torque</b>		18.62 LB-FT
<b>Hz</b>	60 Phase	3	<b>Locked-rotor Torque</b>		21.9 LB-FT
<b>NEMA Design Code</b>	B KVA Code	K	<b>Starting Current</b>		34.1 A
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>		2.25 A
<b>NEMA Nom. Eff.</b>	89.5 Power Factor	76	<b>Line-line Res. @ 25°C</b>		3.58 Ω
<b>Rating - Duty</b>		40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>		62°C
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>		74°C
			<b>Locked-rotor Power Factor</b>		41
			<b>Rotor inertia</b>		0.335 LB-FT <sup>2</sup>

**Load Characteristics 460 V, 60 Hz, 3 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>	36	57	69	76	80	83	78
<b>Efficiency</b>	82	88	89.6	89.8	89.2	88.3	89.3
<b>Speed</b>	1790	1781	1772	1762	1751	1738	1755
<b>Line amperes</b>	2.45	2.86	3.46	4.17	4.95	5.83	4.65

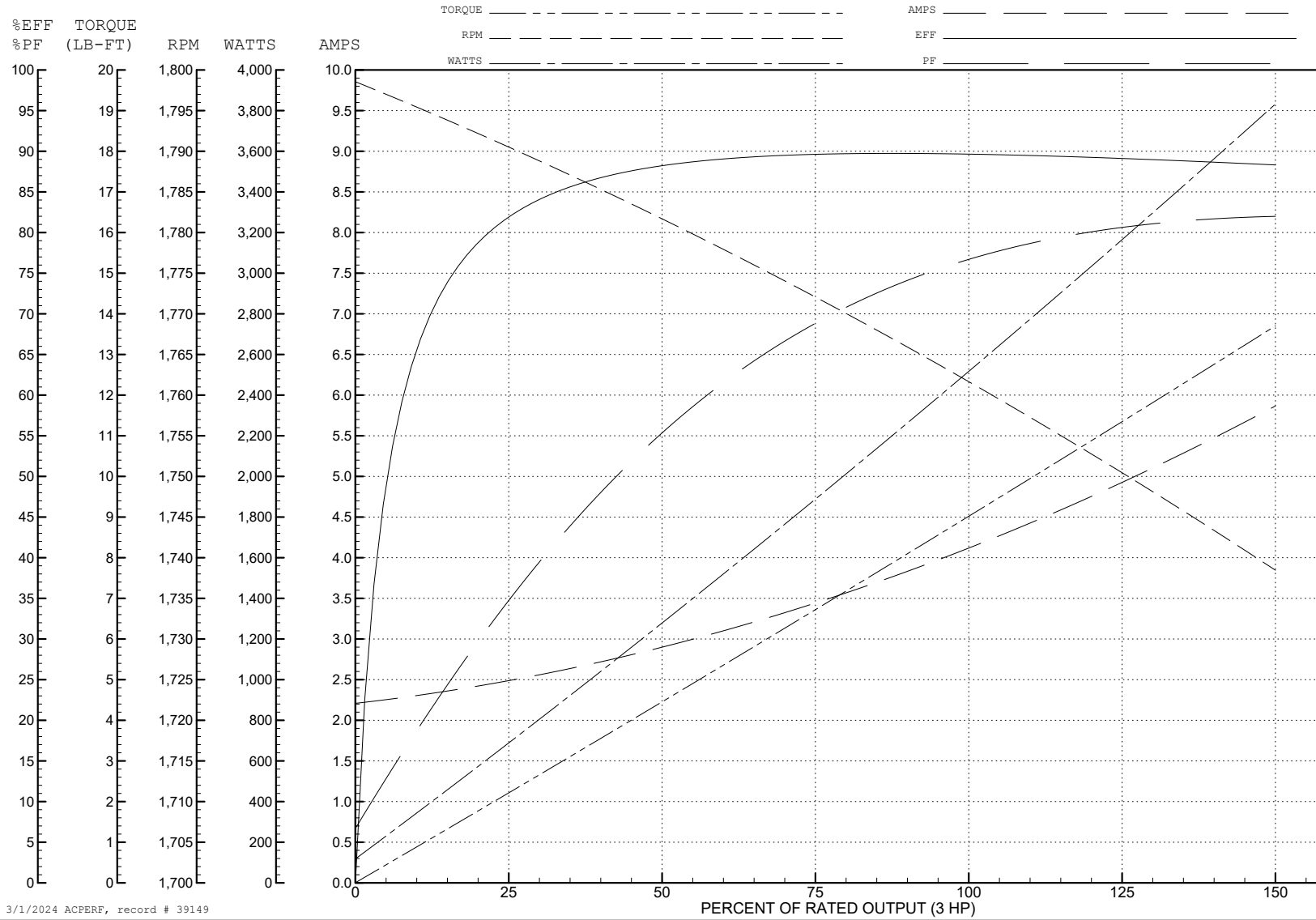
ABB Motors and Mechanical Inc.

WINDING # 36WGS987

3 HP 3 PH 60 HZ 1760 RPM 460 V 3636M

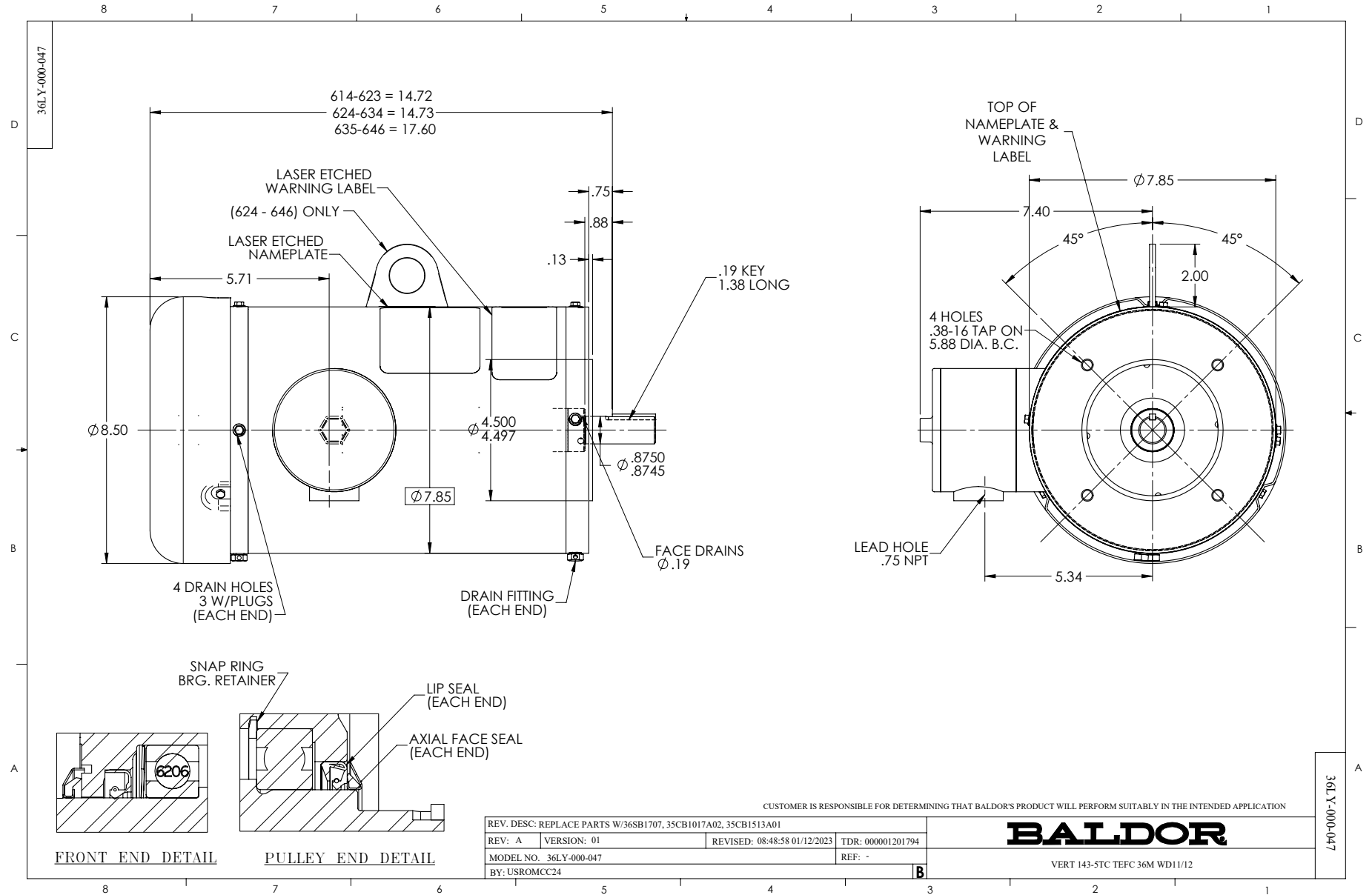
Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=34.81 PU=18.62 LR=21.9 LRA=34.1

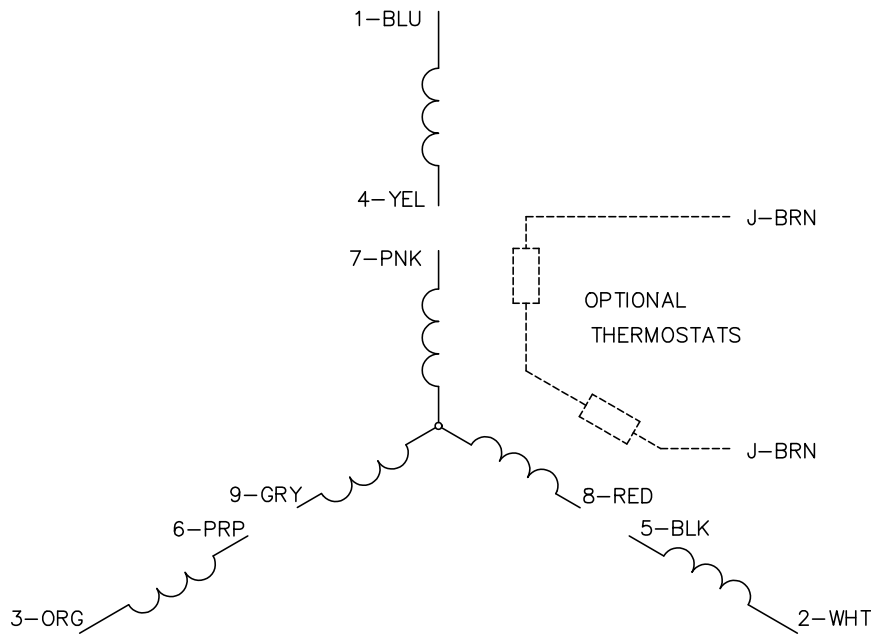


3/1/2024 ACPERF, record # 39149

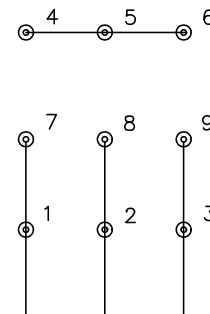




CD0005

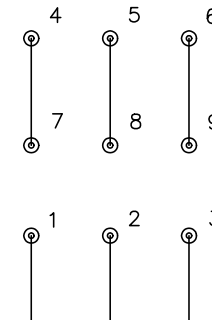


LOW VOLTAGE  
(2Y)



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.

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

CD0005