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# Customer information packet

## CFM3166A

1.5 AIR OVERHP, 1140RPM, 3PH, 60HZ, 56YZ, 353

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPAO
Frame	56YZ
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	C UR US
Ambient Temperature	60 °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	2.500 A @ 460.0 V 5.000 A @ 230.0 V 5.500 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	74.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.5 a

## Part detail

Revision	A
Type	AC
Mech. spec.	35K306
Base	
Status	PRD/A
Elec. spec.	35WGK893
Layout	35LYK306
Eff. date	02-21-2025
CD Diagram	CD0007
Poles	06
Leads	12#18
Proprietary	False
Created date	11-19-2024

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	G
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	12 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3534M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	17.18 IN
Power Factor	75
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Other
Pulley Shaft Indicator	Key And Flat
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1140 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Do Not Use Eve-Not Valid
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Automatic Thermal Overload
Winding Thermal 1 Location	ES
Winding Thermal 2	None

**Nameplate**

<b>NP1257L</b>									
<b>CAT.NO.</b>	CFM3166A								
<b>SPEC.</b>	35K306K893								
<b>HP</b>	1.5 AIR OVER								
<b>VOLTS</b>	208-230/460								
<b>AMP</b>	5.5-5/2.5								
<b>RPM</b>	1140								
<b>FRAME</b>	56YZ			<b>HZ</b>	60		<b>PH</b>	3	
<b>SER.F.</b>	1.15	<b>CODE</b>	G	<b>DES</b>	B	<b>CL</b>	F		
<b>NEMA-NOM-EFF</b>	74	<b>PF</b>	75						
<b>RATING</b>	60C AMB-CONT								
<b>CC</b>									
<b>DE</b>	6203	<b>ODE</b>	6205						
<b>ENCL</b>	OPAO	<b>SN</b>							

## Parts list

Part number	Description	Quantity
SA432355	SA 35K306K893	1.000 ea
RA424604	RA 35K306K893	1.000 ea
TPMYJ43KR	THERMAL 3PH .75 AUT 135 X	1.000 ea
RM1001A01	GROMMET "MIDSTATES"	1.000 ea
11XW0832G06	#8-32 X 3/8, TAPTITE II, HEX WSHR SLTD	1.000 ea
HA6001A01	THERMAL RETAINER (PLATED)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
35EP3210B00	MASTER DE,205 BRG,1.000SH	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.010 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3102B42	PUEP SH THRU HOLE .50 NPT, 2 #26 DRILL F	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35CB4500SP	TERMINAL BOX LID STAMPED	1.000 ea
HA1041A01	CUPPED SLINGER KENCO	1.000 ea
HW2501D40	KEY, 3/16 SQ X 4.750	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
10XN2520A06	1/4 20X3/8 HX HD CAP	3.000 ea
WD1000A16	2-520128-2 AMP FLAG TERMINAL(4M/RL)	12.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
35GS1002A02	GASKET,1/16 THICK NEOPRE.FT.SMITH MADE	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
SP5079A02	MODEL 35 3PH TERM PANEL CONN 12LD DUAL V	1.000 ea
HA3100A41	THRUBOLT 10-32 X 10.500	4.000 ea
LB1118	LABEL,WARNING (ROLL LABEL)	1.000 ea
LC0007A01	CONN LABEL TYPE M,DV,REV,12LD 2Y/1Y TERM	1.000 ea
NP1257L	ALUM UL CC THERMAL REV MTG	1.000 ea
G7PA1000	PKG GRP, PRINT PK1034A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea

FE-0000001

ZRTG FE ASSEMBLY

1.000 ea

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**AC Induction Motor Performance Data**

Record # 110952

Typical performance - not guaranteed values

Winding: 35WGK893-R001		Type: 3534M	Enclosure: OPAO	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	1.5 AIR OVER	Full Load Torque	6.848 LB-FT	
Volts	208-230/460	Start Configuration	direct on line	
Full Load Amps	5.5-5/2.5	Breakdown Torque	16 LB-FT	
R.P.M.	1140	Pull-up Torque	11.1 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque	14.6 LB-FT
NEMA Design Code	B KVA Code	J	Starting Current	11.1 A
Service Factor (S.F.)	1.15	No-load Current	1.31 A	
NEMA Nom. Eff.	76 Power Factor	72	Line-line Res. @ 25°C	19.21 Ω
Rating - Duty	60C AMB-CONT	Temp. Rise @ Rated Load	61°C	
S.F. Amps		Temp. Rise @ S.F. Load	79°C	
		Locked-rotor Power Factor	60.2	
		Rotor inertia	0.246 lb-ft <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 1.5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	57	68	75	79	82	77
Efficiency	68	75.7	76.7	75.4	71.4	65.2	73
Speed	1185.5	1171.3	1155.1	1136.7	1109.7	1070.8	1120
Line amperes	1.43	1.68	2.03	2.46	3.02	3.72	2.8

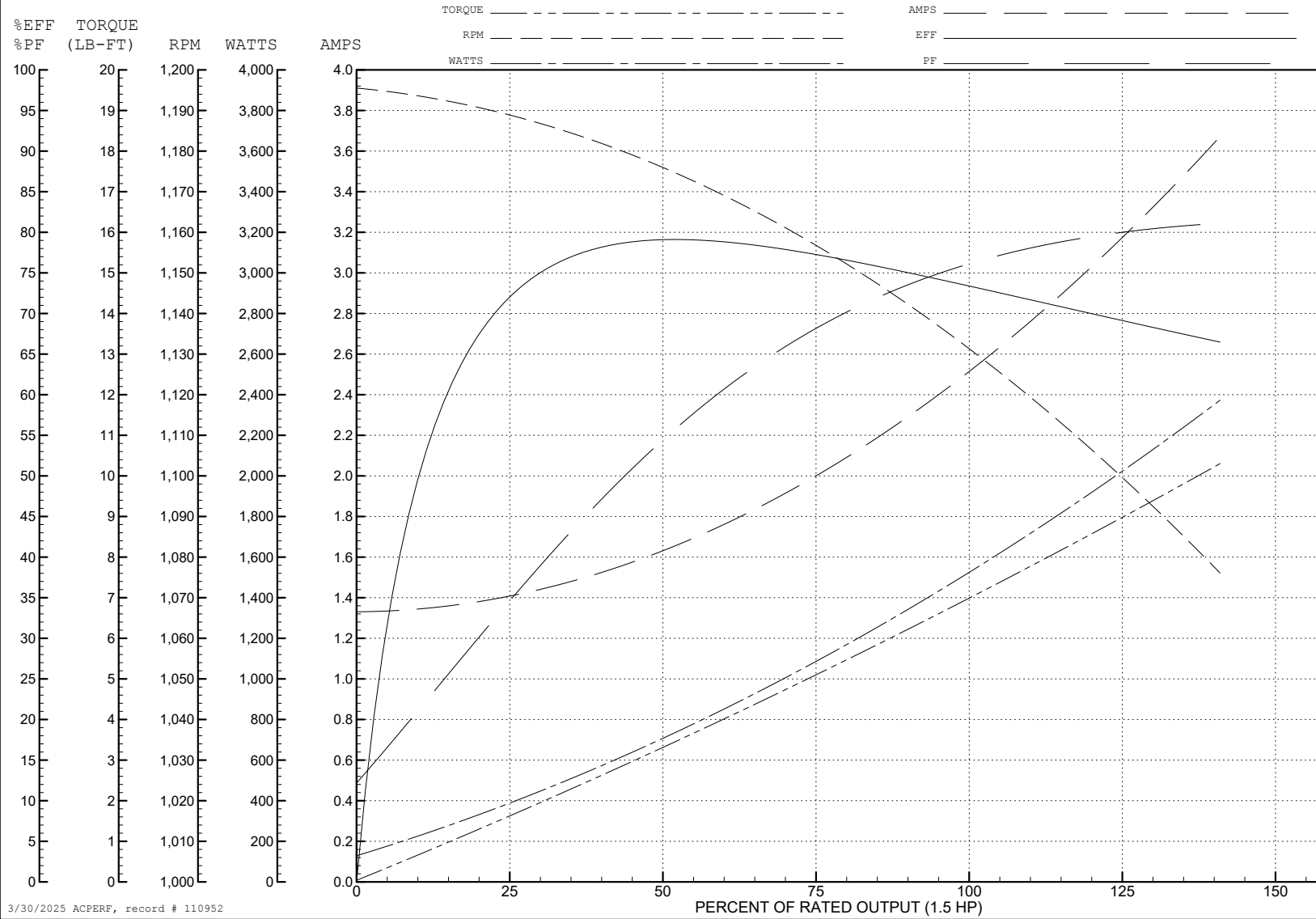
ABB Motors and Mechanical Inc.

WINDING # 35WGK893

1.5 HP 3 PH 60 HZ 1140 RPM 460 V 3534M

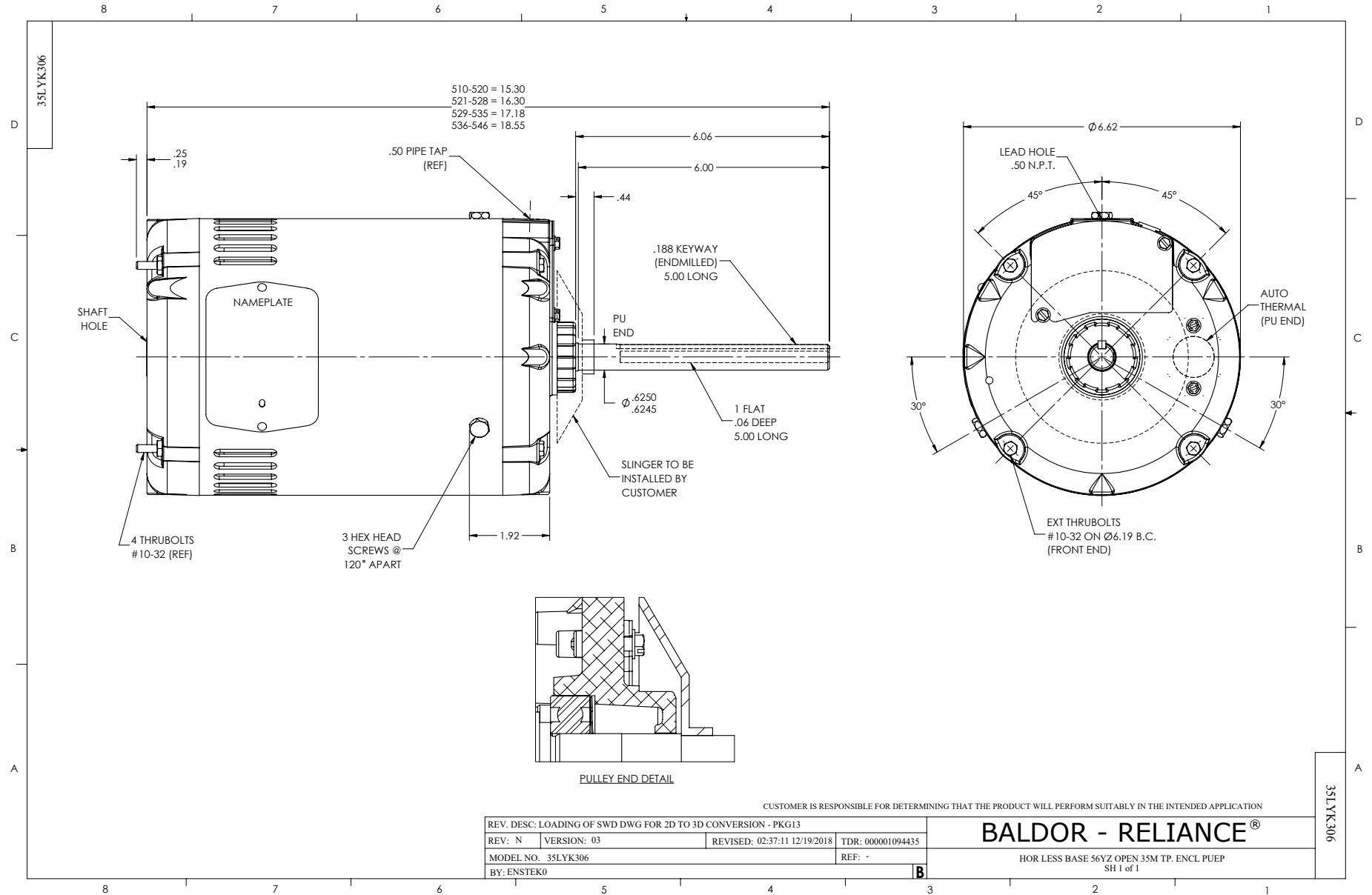
Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=16 PU=11.1 LR=14.6 LRA=11.1

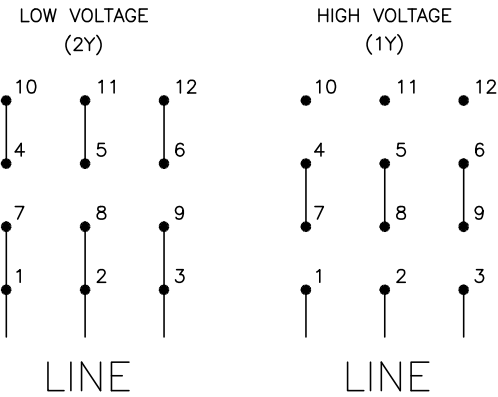
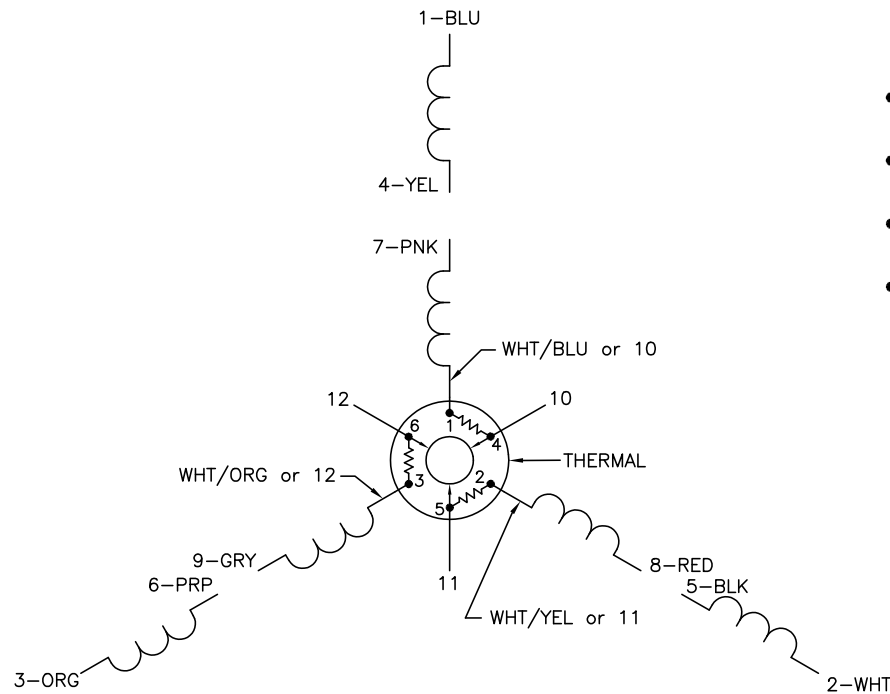


3/30/2025 ACPERF, record # 110952





CD0007



- NOTES:
1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
  2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
  3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: ADDED "CK" PLANT CODE			
REV. LTR: E	BY: EAH	REVISED: 05/06/99 17:1	TDR: 0181040
L00000		FILE: AAA00008370	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, THERMAL, 12 LEADS

CD0007