

BALDOR • RELIANCE

Customer information packet

VHEM2514T

20HP, 3520RPM, 3PH, 60HZ, 254HP, 0936M, OPEN, F

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	254HP
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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	46.000 A @ 230.0 V 50.000 A @ 208.0 V 23.000 A @ 460.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Drip Cover Mounting
Front Shaft Indicator	None

Part detail

Revision	P
Type	AC
Mech. spec.	09G625
Base	
Status	NLA/A
Elec. spec.	09WGZ601
Layout	09LYG625
Eff. date	02-21-2022
CD Diagram	CD0005
Poles	02
Leads	9#12
Proprietary	False
Created date	07-13-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	23.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0936M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	26.73 IN
Power Factor	89
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	P-Base
Pulley Shaft Indicator	P-Base Groove & Key
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	Shaft Slinger
Speed	3520 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

NP1259L									
CAT.NO.	VHEM2514T								
SPEC.	09G625Z601G1								
HP	20								
VOLTS	230/460								
AMP	46/23								
RPM	3520								
FRAME	254HP	HZ	60	PH	3				
SER.F.	1.15	CODE	H	DES	A	CL	F		
NEMA-NOM-EFF	91	PF	89						
RATING	40C AMB-CONT								
CC	010A								
DE	6312	ODE	6208						
ENCL	OPEN	SN							

Parts list

Part number	Description	Quantity
SA303803	SA 09G625Z601G1	1.000 ea
RA290944	RA 09G625Z601G1	1.000 ea
09CB3002A45	KOBX: 1.50 NPT LD HL, 2.63 MTG .28 DIA	1.000 ea
10XN2520K12	1/4-20 X.75 GRD 5	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
09AD2003	AIR DEFLECTOR, 309 OPEN P-BASE	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	3.000 ea
09EP1203A01P4	FREP, MACH W/FINISH PAINT ONLY	1.000 ea
10XN3816K40	3/8-16 X 2.50 HEX HD CAP SCREW, GRADE 5	2.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	2.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HW4600B61	SEAL,V70A FORSH/400700 CR	1.000 ea
10XN3118K68	5/16 18 X 4 1/4 HEX HEAD CAP	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
09EP1508A06	ENDPLATE, MACH W/312 BRG	1.000 ea
10XN3816K40	3/8-16 X 2.50 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
09FH1502A01	DRIP COVER	1.000 ea
HW3201A11	.38-16 EYEBOLT W/4.00 SHANK	2.000 ea
HW1000A38	WASHER, 3/8" FLAT, SAE Z/P	2.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	2.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
HW2501E18	KEY, 1/4 SQ X 2.000	1.000 ea
LB1182	WARNING LABEL FOR MOTORS WITH EYENUTS	2.000 ea

HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MG1025G05	WILKOFAS, 789.227, MED. GRAY CHAR. MET.	0.200 ga
MJ1000A02	GREASE, POLYREX EM EXXON	0.080 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LC0005E01	SPL CONN.DIA./WARN.LABEL(LC0005/LB1119)	1.000 ea
NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
42PA1033	PACKAGING GROUP, USE WITH PK6017	1.000 ea
07PA1095	PKG GRP, VER 07 CAST IRON	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LD7020D09	LEAD SET, 12AWG, 9 LEAD, 20" LONG LEADS	1.000 ea

AC Induction Motor Performance Data

Record # 78405

Typical performance - not guaranteed values

Winding: 09WGZ601-R005		Type: 0936M		Enclosure: OPEN	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	20	Full Load Torque	29.6 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	46/23	Breakdown Torque	111 LB-FT		
R.P.M.	3520	Pull-up Torque	39.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque	49.6 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	161 A
Service Factor (S.F.)	1.15	No-load Current	7.17 A		
NEMA Nom. Eff.	91	Power Factor	89	Line-line Res. @ 25°C	0.447 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	76°C	
S.F. Amps			Temp. Rise @ S.F. Load	95°C	
			Locked-rotor Power Factor	29	
			Rotor inertia	0.92 LB-FT ²	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	78	86	89	90	90	90
Efficiency	88.5	91.9	92.2	91.6	90.5	89.1	90.9
Speed	3580	3562	3541	3520	3495	3468	3505
Line amperes	9	13	17.7	22.9	28.6	35	26.3

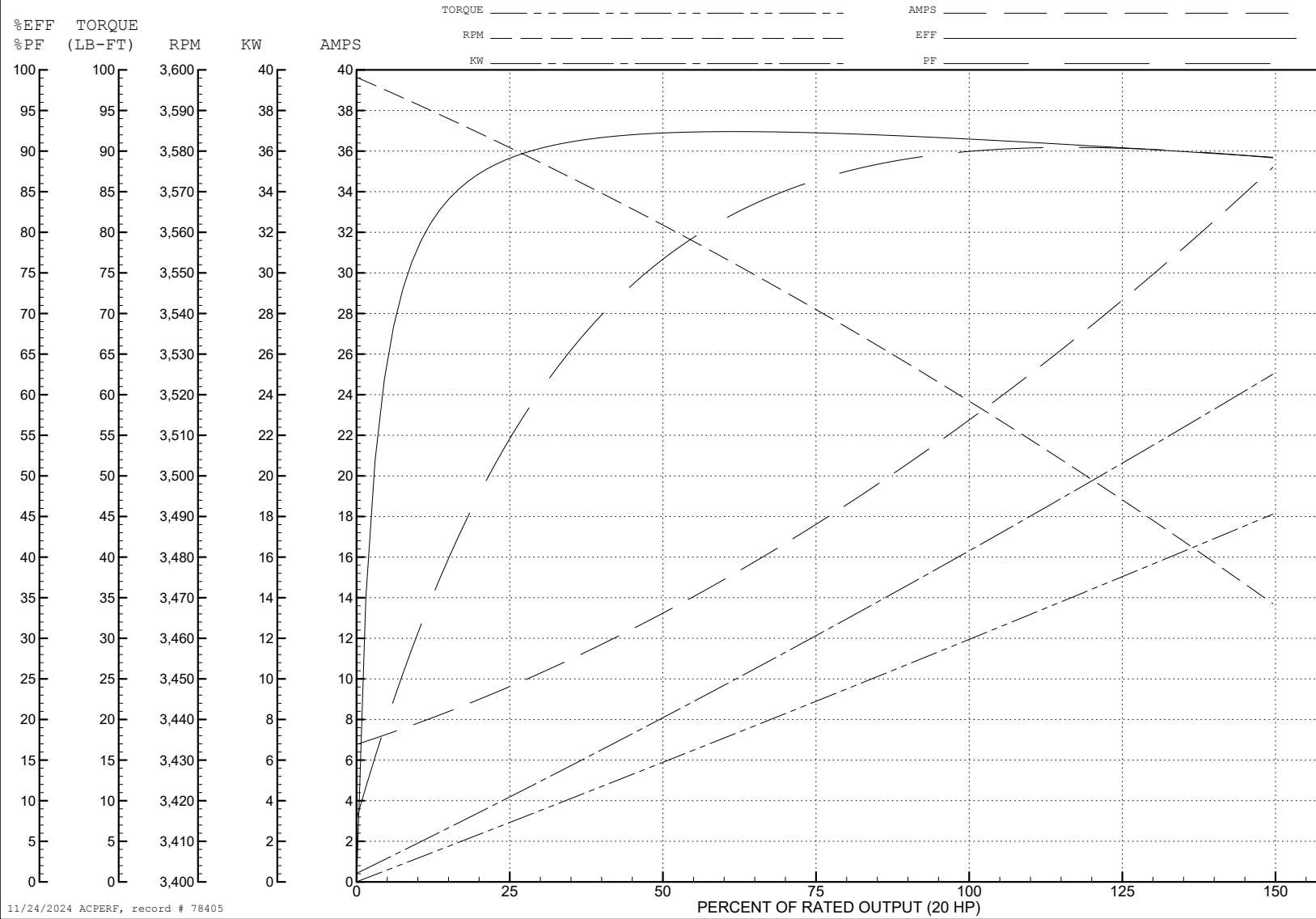
ABB Motors and Mechanical Inc.

WINDING # 09WGZ601

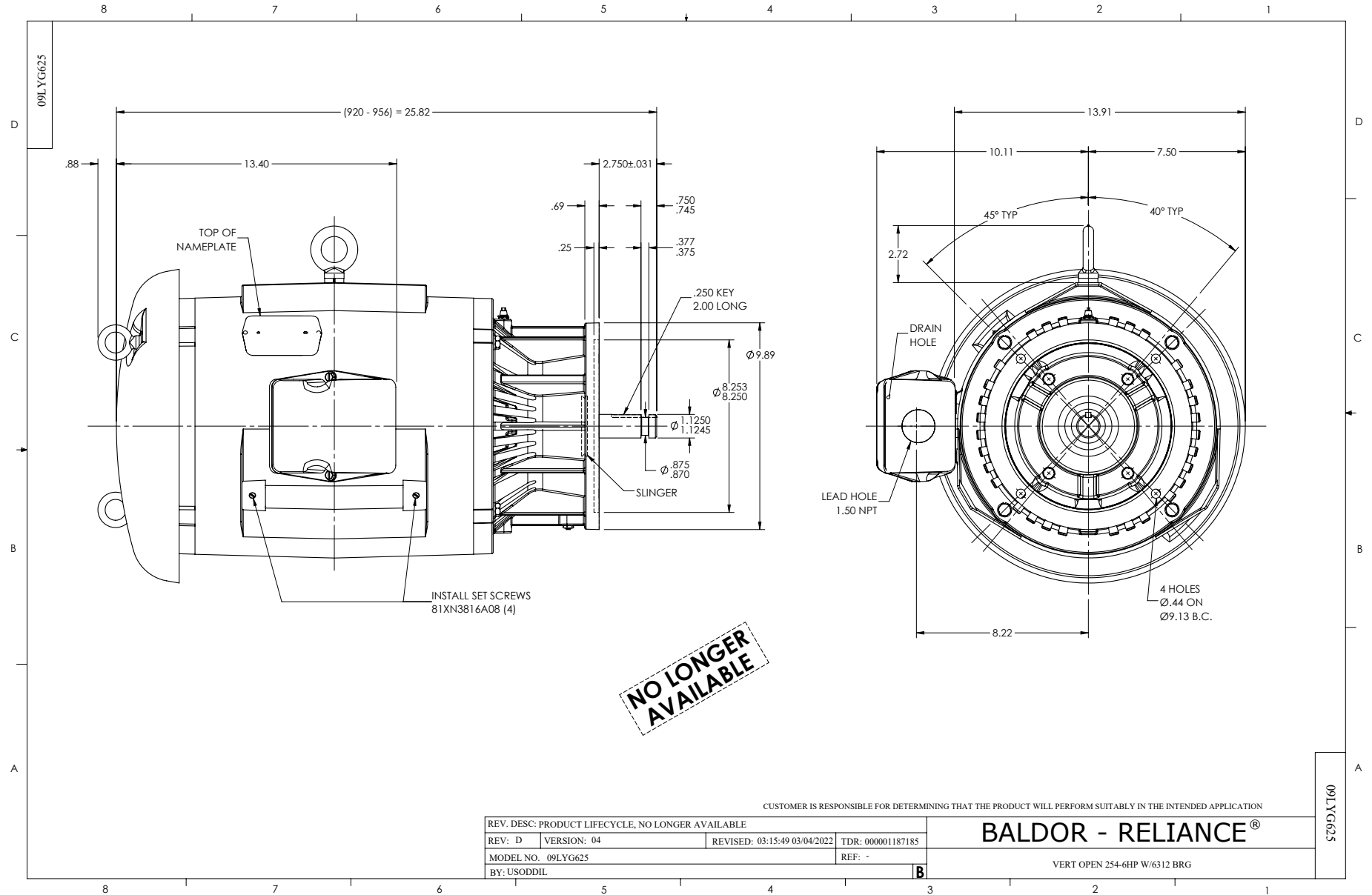
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3520 RPM 460 V 0936M

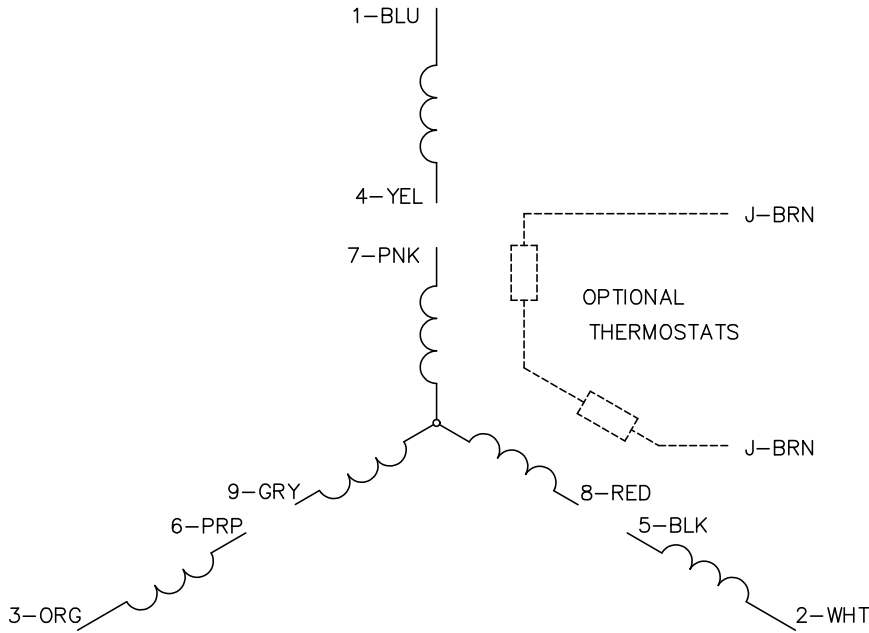
TORQUES (LB-FT): PO=111 PU=39.1 LR=49.6 LRA=161



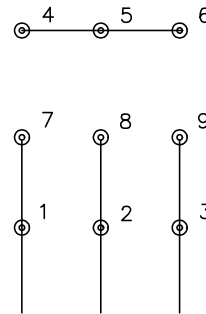
11/24/2024 ACPERF, record # 78405



CD0005

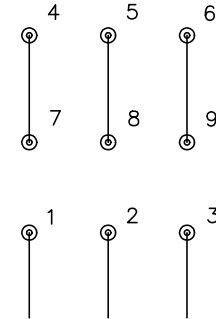


LOW VOLTAGE
(2Y)



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

500000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS