ABB BALDOR RELIANCE

Customer information packet

EM2531T-8

25HP, 1770RPM, 3PH, 60HZ, 284T, 4050M, OPSB, F1

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Specifications

Enclosure	OPSB
Frame	284T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	25.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	200.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	NEMA PREMIUM
	NEMA PREMIUM (OLD LOGO)
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	70.000 A @ 200.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	70.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE

Part Detail

Revision	X
Type	AC
Mech. spec.	40G48
Base	
Status	PRD/A
Elec. spec.	40WGX796
Layout	40LYG048
Eff. date	09-02-2025
CD Diagram	CD0695
Poles	04
Leads	6#6
Proprietary	False
Created date	01-22-2013

KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4050M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.06 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Part Winding
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3554L											
CAT.NO.	EM2531T-8			**P/N**						**ENCL**	OPSB
SPEC.	40G048X796	**CC**	010A		**FRAME**	284T		**SER.NO.**			
HP	25		**CLASS**	F		**HZ**	60				
RPM	1770		**PH**	3		**DES**	A				
VOLTS	200			**CODE**	G			**ODE BRG**	6309	**DE BRG**	6311
AMPS	70										
RATING	40C AMB-CONT				**NEMA-NOM-EFF**		93.6		**GREASE**	POLYREX EM	
PF	82	**SER.F.**	1.15		**VPWM INVERTER READY**						
HTR-VOLTS		**HTR-AMPS**			**MAX. SPACE HEATER TEMP.**						

Parts List

Part number	Description	Quantity
SA257341	SA 40G048X796	1.000 ea
RA244127	RA 40G048X796	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 ea
40EP3200A02	STD FREP OPEN 309 BRG	1.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
40EP3200B05	STD PUEP OPEN 311 BRG	1.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	8.000 ea
10CB3500	CONDUIT BOX LID, CAST	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.070 ga
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
HA3154A04	THRUBOLT STUD 3/8-16 X 18.750	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

LC0695	CONNECTION LABEL	1.000 ea
NP3554L	SS SUPER-E,CURUS-EEV,NEMA PREM,CC,300 SR	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea
FE-0000022	ZRTG FE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
40-1400	C FACE KIT	A8

AC Induction Motor Performance Data
Record # 41057
Typical performance - not guaranteed values

Winding: 40WGX796-R001	**Type:** 4050M	**Enclosure:** OPSB

Nameplate Data				**200 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			25	**Full Load Torque**	74.1 LB-FT
Volts			200	**Start Configuration**	direct on line
Full Load Amps			70	**Breakdown Torque**	213 LB-FT
R.P.M.			1770	**Pull-up Torque**	91.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	124 LB-FT
NEMA Design Code	B	**KVA Code**	G	**Starting Current**	432 A
Service Factor (S.F.)			1.15	**No-load Current**	29 A
NEMA Nom. Eff.	93.6	**Power Factor**	82	**Line-line Res. @ 25ºC**	0.0619 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	33°C
S.F. Amps				**Temp. Rise @ S.F. Load**	40°C
				Locked-rotor Power Factor	33
				Rotor inertia	3.96 LB-FT2

Load Characteristics 200 V, 60 Hz, 25 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	46	68	78	82	84	83	83
Efficiency	89.6	93	93.8	93.6	93.1	92.3	93.3
Speed	1793	1786	1780	1772	1764	1754	1767
Line amperes	32.7	42.4	55	69.9	85.7	104	79.4

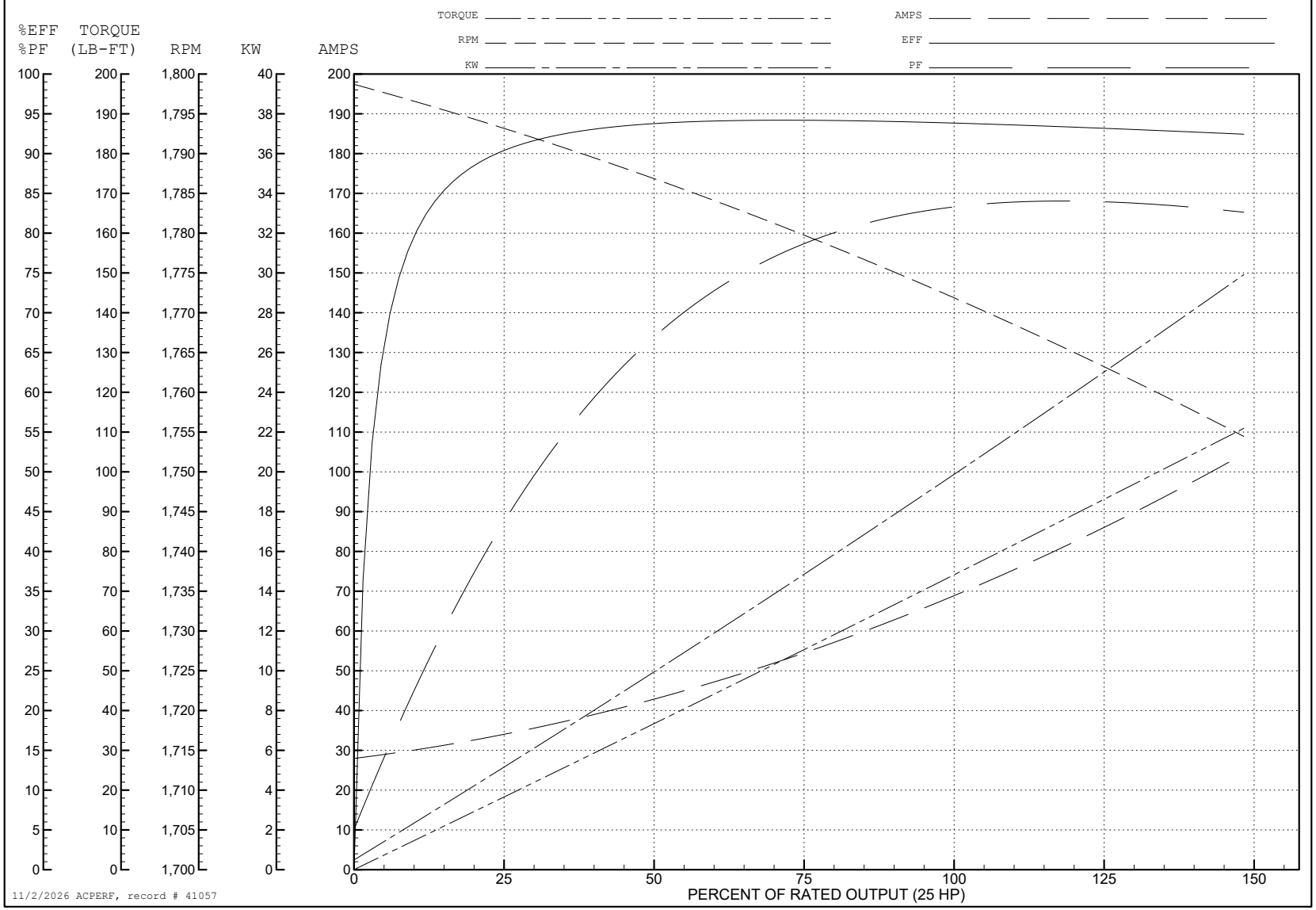
ABB Motors and Mechanical Inc.

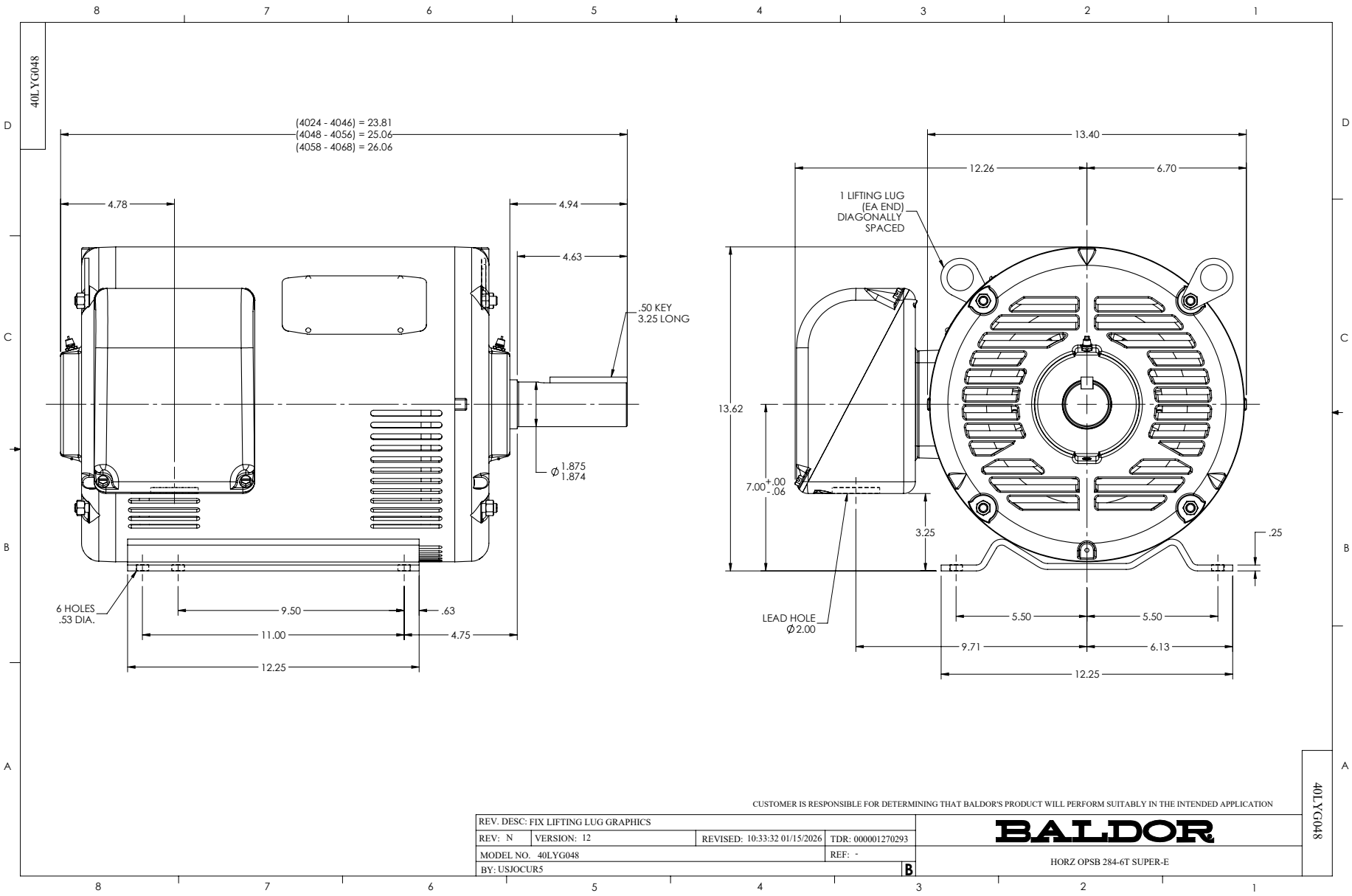
WINDING # 40WGX796

Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1770 RPM 200 V 4050M

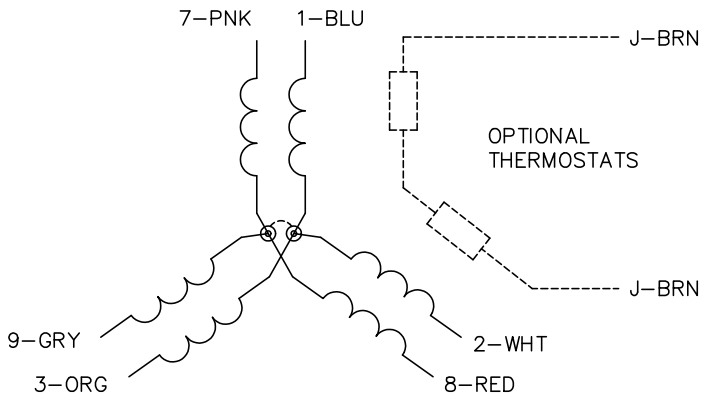
TORQUES(LB-FT): PO=213 PU=91.1 LR=124 LRA=432



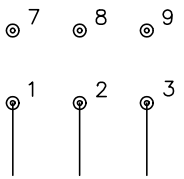

40LYG048
(4024 - 4046) = 23.81
(4048 - 4056) = 25.06
(4058 - 4068) = 26.06
4.78
4.94
4.63
.50 KEY
3.25 LONG
Ø 1.875
1.874
6 HOLES
.53 DIA.
9.50
.63
11.00
4.75
12.25
13.40
12.26
6.70
1 LIFTING LUG
(EA END)
DIAGONALLY
SPACED
13.62
7.00 +.00 -.06
3.25
.25
LEAD HOLE
Ø 2.00
5.50
5.50
9.71
6.13
12.25
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: FIX LIFTING LUG GRAPHICS
REV: N
VERSION: 12
REVISED: 10:33:32 01/15/2026
TDR: 000001270293
MODEL NO. 40LYG048
REF: -
BY: USJOCUR5
B
BALDOR
HORZ OPSB 284-6T SUPER-E
40LYG048

CD0695

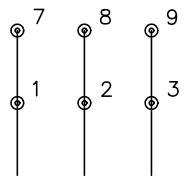
TYPICAL WYE–CONNECTED MOTOR



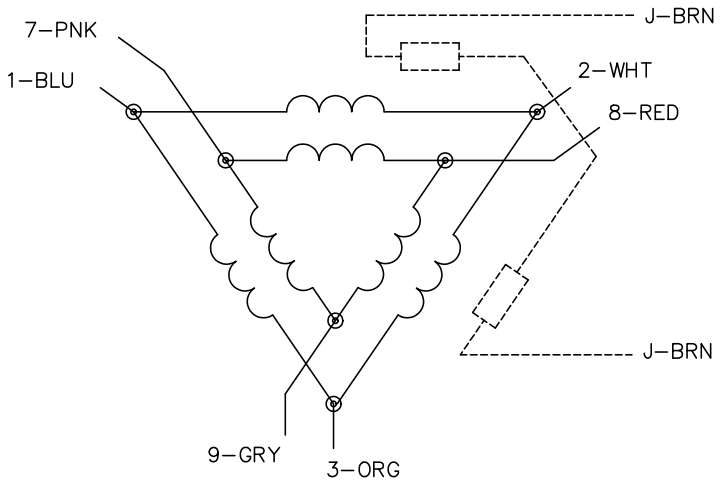
START CONNECTION



RUN CONNECTION



TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. MOTOR MAY BE 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 ALWAYS BE NUMBERED AS SHOWN.

CD0695

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: C	BY: JLP	REVISED: 01/21/99 3:19	TDR: 0171435
CD0695		FILE: AAA00005151	MDL: –
		MTL: –	3PH, SV, 6 LEADS, PART WINDING START