

BALDOR® • RELIANCE 

Product Information Packet

EM2531T-12

25HP, 1770RPM, 3PH, 60HZ, 284T, 4046M, OPSB, F1

Part Detail							
Revision:	S	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGX794	CD Diagram:	CD0104	Mfg Plant:	
Mech. Spec:	40G48	Layout:	40LYG048	Poles:	04	Created Date:	01-22-2013
Base:	RG	Eff. Date:	01-12-2021	Leads:	12#10		

Specs			
Catalog Number:	EM2531T-12	Inverter Code:	Inverter Ready
Enclosure:	OPSB	IP Rating:	NONE
Frame:	284T	KVA Code:	G
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	25.000 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	12 @ 10 AWG
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
Agency Approvals:	UR	Motor Type:	4050M
	CSA EEV	Mounting Arrangement:	F1
	CSA	Power Factor:	82
Auxillary Box:	No Auxillary Box	Product Family:	General Purpose
Auxillary Box Lead Termination:	None	Pulley End Bearing Type:	Ball
Base Indicator:	Rigid	Pulley Face Code:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Pulley Shaft Indicator:	Standard
Blower:	None	Rodent Screen:	None
Current @ Voltage:	30.000 A @ 460.0 V	Shaft Extension Location:	Pulley End
	60.000 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding

Design Code:	B	Shaft Rotation:	Reversible
Drip Cover:	No Drip Cover	Shaft Slinger Indicator:	No Slinger
Duty Rating:	CONT	Speed Code:	Single Speed
Electrically Isolated Bearing:	Not Electrically Isolated	Motor Standards:	NEMA
Feedback Device:	NO FEEDBACK	Starting Method:	Wye Start - Delta Run
Front Face Code:	Standard	Thermal Device - Bearing:	None
Front Shaft Indicator:	None	Thermal Device - Winding:	None
Heater Indicator:	No Heater	Vibration Sensor Indicator:	No Vibration Sensor
Insulation Class:	F	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP3554LUA											
CAT.NO.	EM2531T-12			P/N				ENCL	OPSB		
SPEC.	40G048X794		CC	010A		FRAME	284T		SER.NO.		
HP	25		CLASS	F		HZ	60				
RPM	1770		PH	3		DES	B				
VOLTS	230/460			CODE	G		ODE BRG	6309		DE BRG	6311
AMPS	60/30			USABLE AT	208V						
RATING	40C AMB-CONT			NEMA-NOM-EFF	93.6		GREASE	POLYREX EM			
PF	82		SER.F.	1.15		CT30-60(2:1)		VT3-60(20:1)			
USABLE AT	50HZ 25HP 190/380V 72/36A				SF 1.0						
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.					

Parts List		
Part Number	Description	Quantity
SA257339	SA 40G048X794	1.000 EA
RA244125	RA 40G048X794	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	8.000 EA
10CB3500SP	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
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	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
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.070 GA
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
LB1119N	WARNING LABEL	1.000 EA
LC0104A01	CONNECTION DIAGRAM	1.000 EA
NP3554LUA	SS SUPER-E VPWM INV READY UL CSA-EEV PRE	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA

AC Induction Motor Performance Data

Record # 41055

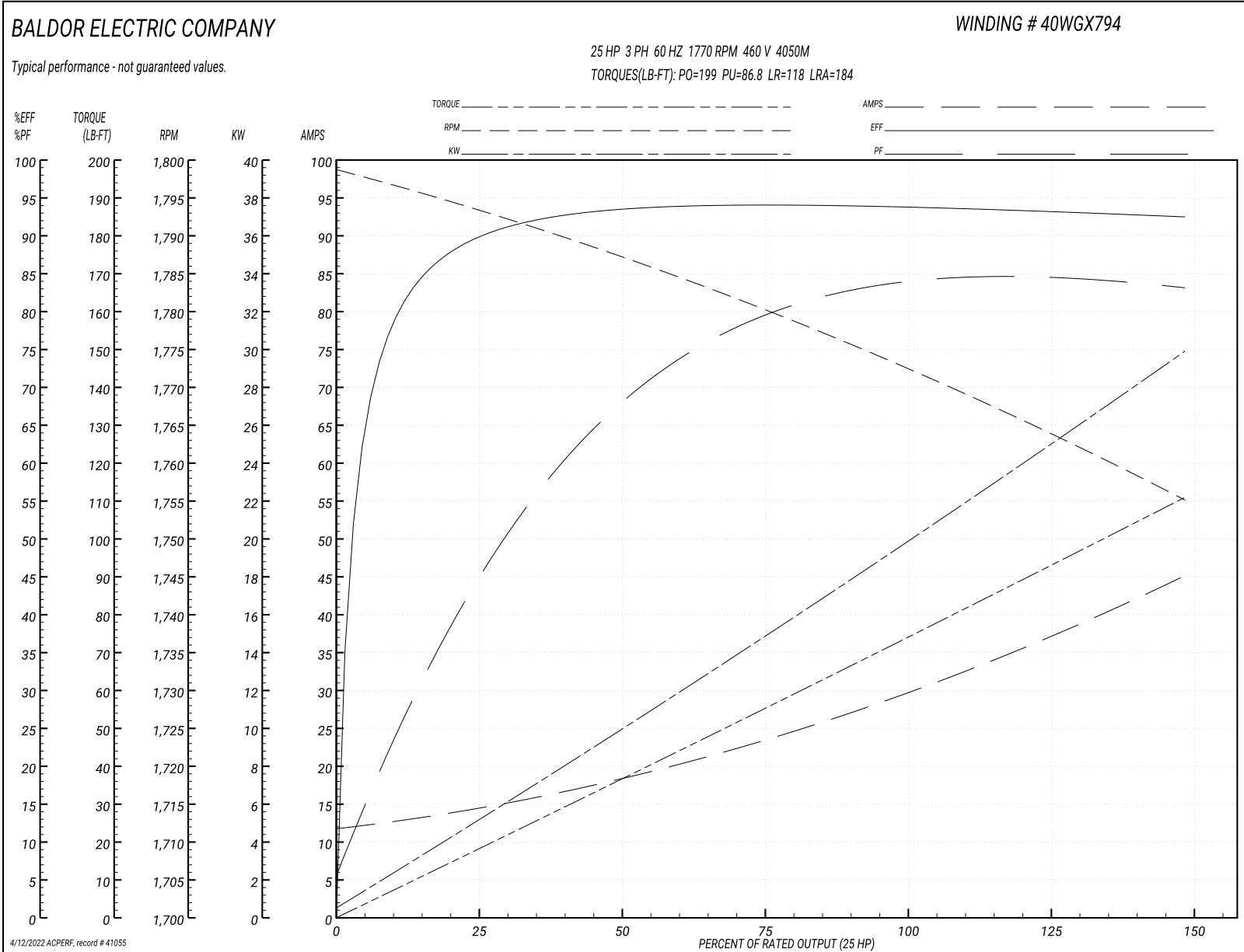
Typical performance - not guaranteed values

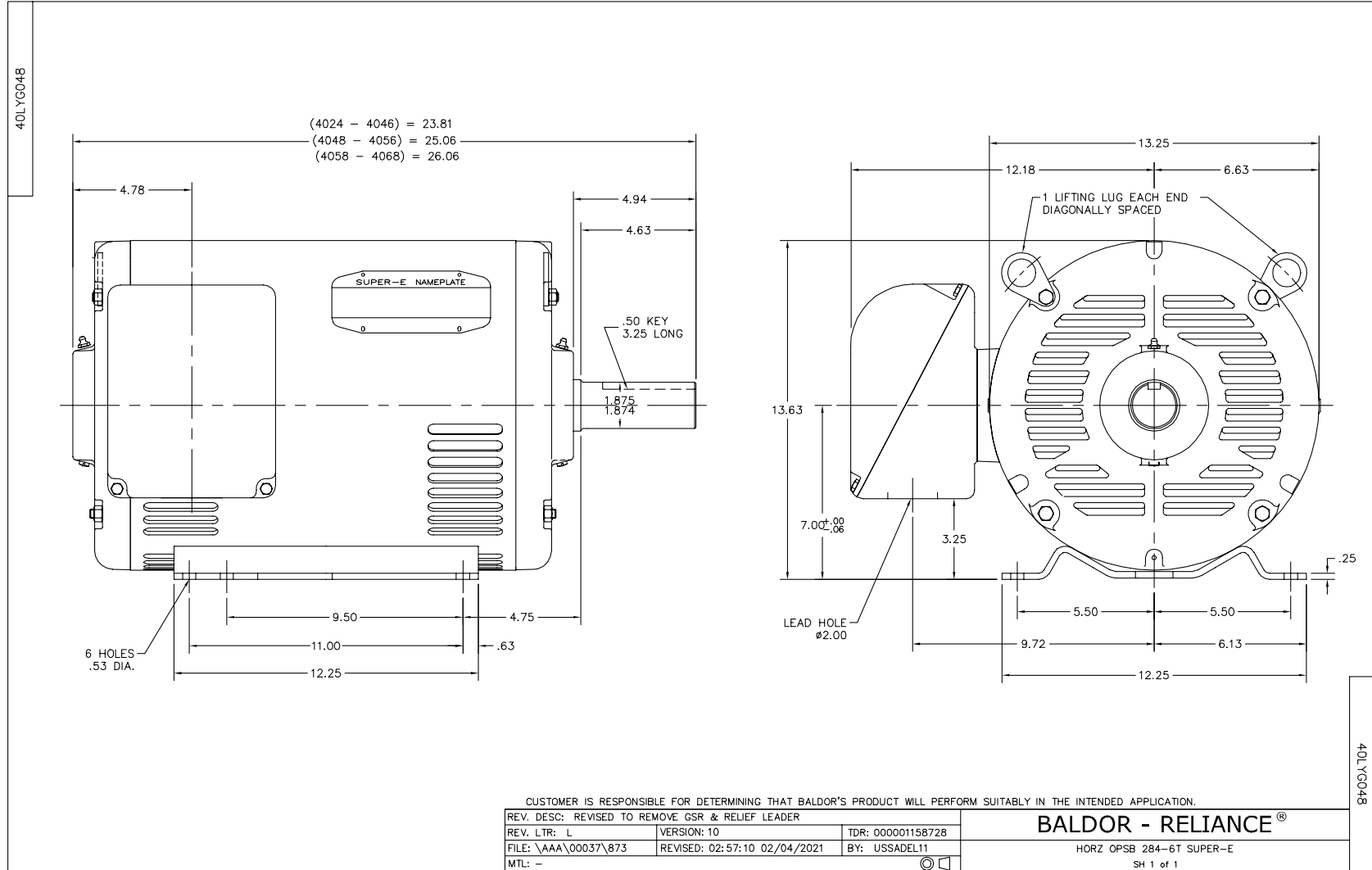
Winding: 40WGX794-R001		Type: 4050M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	25	Full Load Torque	74.1 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	60/30	Breakdown Torque	199 LB-FT		
R.P.M.	1770	Pull-up Torque	86.8 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	118 LB-FT	
NEMA Design Code	B KVA Code	G	Starting Current	184 A	
Service Factor (S.F.)	1.15	No-load Current	12.2 A		
NEMA Nom. Eff.	93.6	Power Factor	82	Line-line Res. @ 25°C	0.315 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	28°C	
S.F. Amps			Temp. Rise @ S.F. Load	35°C	
			Locked-rotor Power Factor	33	
			Rotor inertia	3.96 LB-FT ²	

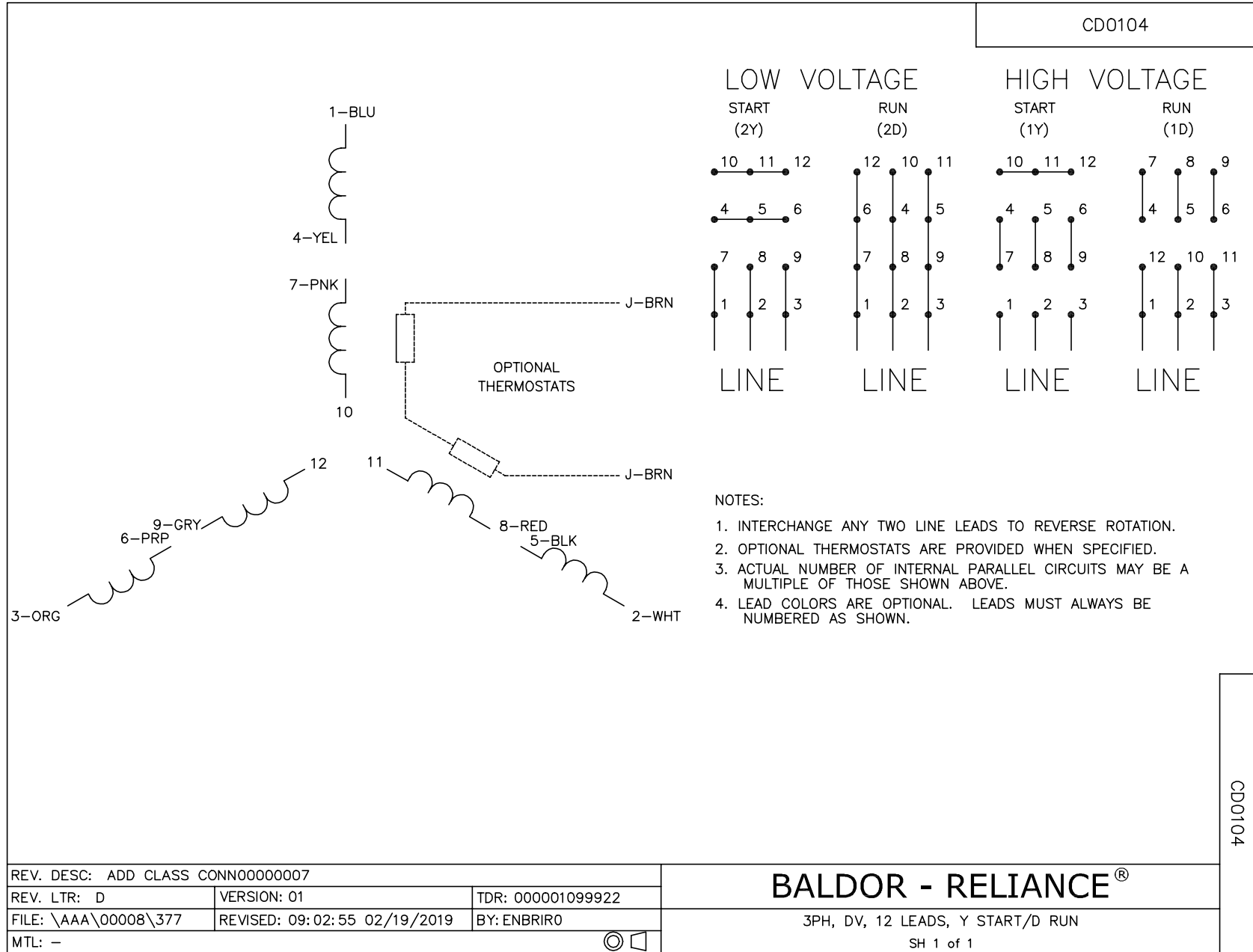
Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	70	79	83	84	84	84
Efficiency	89.7	93.5	94	93.9	93.4	92.4	93.6
Speed	1793	1787	1780	1773	1764	1755	1768
Line amperes	13.9	18.2	23.7	30.1	37.1	44.9	34.3

Performance Graph at 460V, 60Hz, 25.0HP Typical performance - Not guaranteed values







Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>