ABB BALDOR RELIANCE

Customer information packet

IDNM3770T

7.5HP, 1760RPM, 3PH, 60HZ, 213TC, 0748M, TENV
Class - None
Division - Not Applicable

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Specifications

Enclosure	TENV
Frame	213TC
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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	UR
	CSA
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	17.800 A @ 230.0 V
	8.900 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Encoder/Feedback Device
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	8.9 a

Part Detail

Revision	K
Type	AC
Mech. spec.	07J135
Base	
Status	PRD/A
Elec. spec.	07WGX647
Layout	07LYJ135
Eff. date	10-01-2026
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	11-14-2014

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	6000 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0748M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.40 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1760 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP4009L									
CAT.NO.	IDNM3770T								
SPEC.	07J135X647G1								
FRAME	213TC		**H.P.**	7.5 TE					
VOLTS	230/460 1000:1 CT/VT								
MAG. CUR.	7.2/3.6			**F.L. AMPS**	17.8/8.9				
R.P.M.	1760			**R.P.M. MAX**	6000				
HZ.	60	**PH.**	3	**CLASS**	F				
SER.F.	1.00	**DES.**	B	**SL HZ**	1.33				
NEMA NOM. EFF.	92.4	**WK2**	1.18						
BLOWER		**V**		**PH**		**HZ**		**AMPS**	
RATING	40C AMB-CONT								
DE	6307	**ODE**	6206						
CC	010A	**SN**							
	1.5:1 CHP PWM								

Parts List

Part number	Description	Quantity
SA289949	SA 07J135X647G1	1.000 ea
RA276110	RA 07J135X647G1	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
09CB3002SP	CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
37EP1100B86	FRONT TENV 206 BRG W/ GRSR & THRU-SH ENC	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37PE1300A01	PU ENDPLATE ASSEMBLY FOR ROUTING	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
10XN2520A30	HEX HD CAP SCREW-STD THD-.25 X 20 THD PE	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35FH4801G	THRU-SHAFT ENCODER COVER INV/VECTOR F1 &	1.000 ea
WD4129	1.50 X 1.50 GRAY SNAP IN PLUG PROMOULD #	2.000 ea
10XN2520A08	1/4-20X1/2 HEX HEAD CAP	4.000 ea
10XN2520A08	1/4-20X1/2 HEX HEAD CAP	2.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
09GS1013SP	GS FOR 09CB3501, 12CB1500 & 12CB1503 LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.005 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.036 ga
LC0145B01	CONNECTION LABEL	1.000 ea

NP4009L	SS INV UL CSA-EEV CC NEMA PREM	1.000 ea
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 ea
10XL3807A28	3/8-7 X 1 3/4" LAG SCREW	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

				WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP VOLTS	230/460						
NP AMPS	17.8/8.9	Base Volt	460	R1	0.712	X1	2.680
HP	7.5	NL AMPS	3.53	R2	0.463	X2	2.170
BASE SPEED	1762	Slip (HZ)	1.27			XM	70.300
PHASE/HZ	3/60	WK^2 (lb-ft^2)	1.180				

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1762	7.5	22.4	460	60	9.1
Max Speed	2642	7.5	14.9	460	90	8.8
CT Min Speed	1.762	0.008	22.4	0.46	0.06	9.1

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	460	60	3.5
1/4	1790	1.8	5.4	460	60	4.1
1/2	1781	3.8	11.1	460	60	5.4
3/4	1771	5.6	16.7	460	60	7.1
Full Load	1762	7.5	22.4	460	60	9.1
O/L	1727	15.0	45.6	460	60	18.3

Blower Data	Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data

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CK BY CD
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DATE 11/1/2024

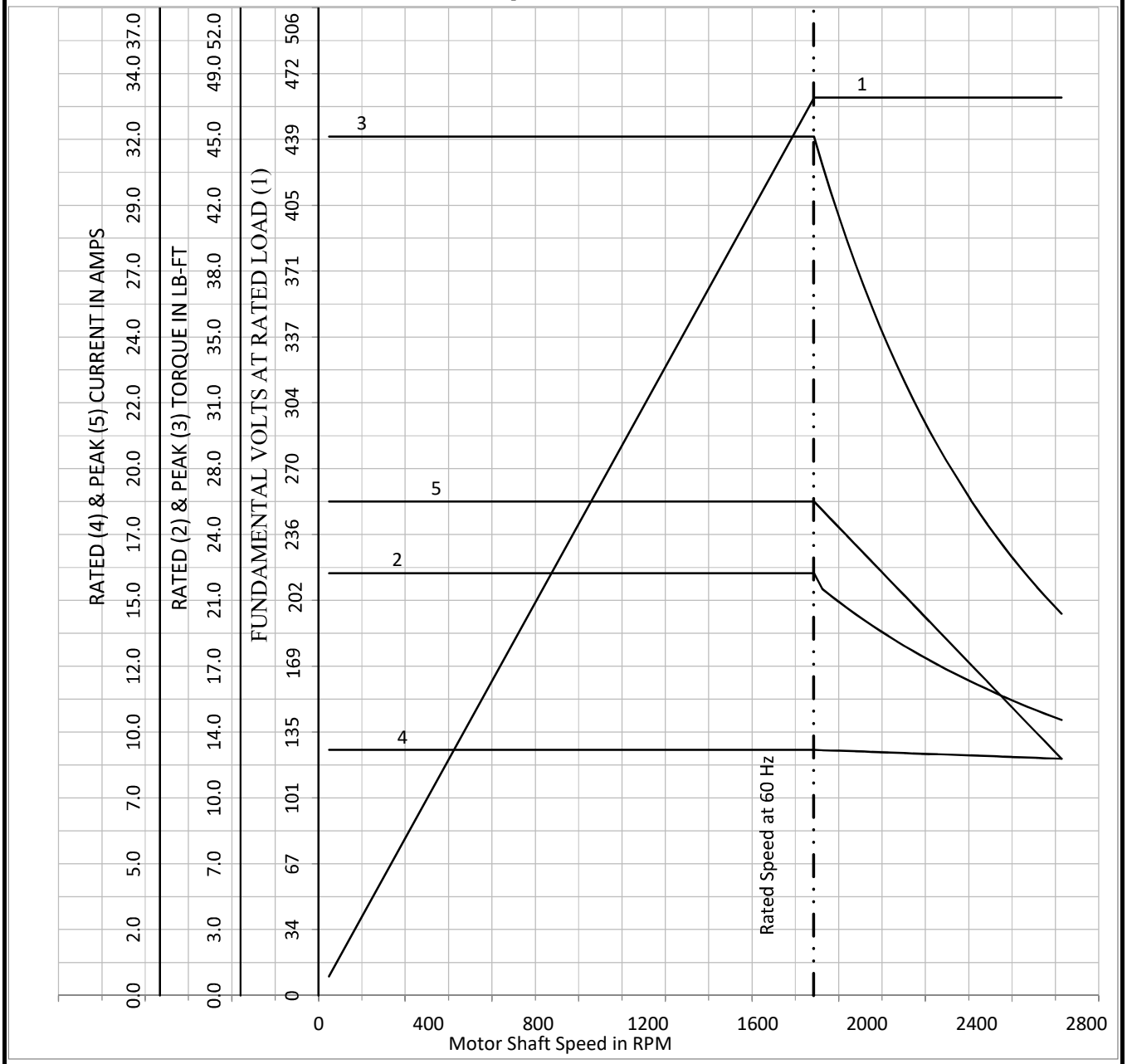
A-C MOTOR PERFORMANCE CURVES

07WGX647

Record: 98905

				WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP VOLTS	230/460			R1	0.712	X1	2.680
NP AMPS	17.8/8.9	Base Volt	460	R2	0.463	X2	2.170
HP	7.5	NL AMPS	3.53			XM	70.300
BASE SPEED	1762	Slip (HZ)	1.27				
PHASE/HZ	3/60	WK^2 (lb-ft^2)	1.180				

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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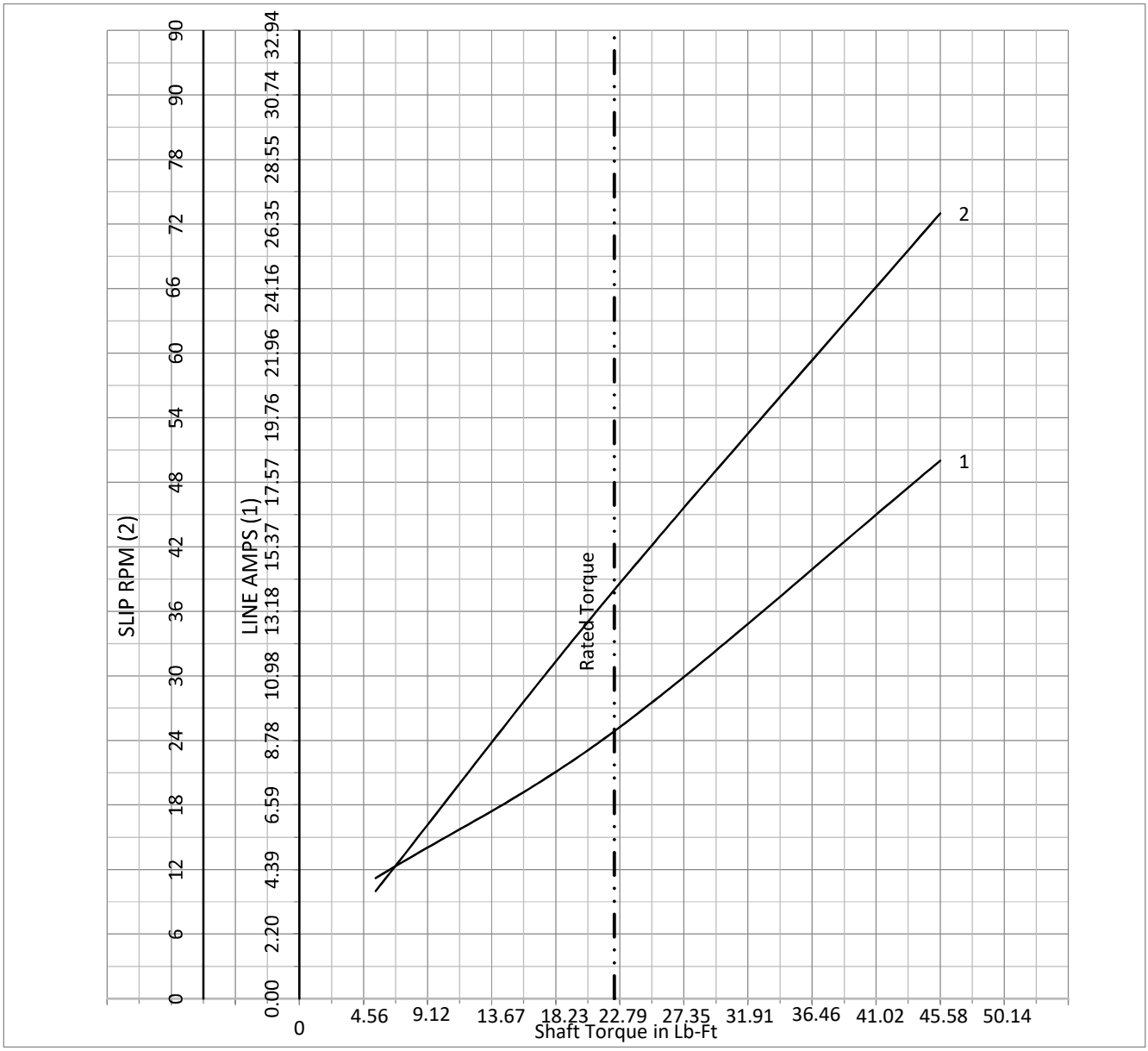
07WGX647

Record: 98905

NP VOLTS	230/460	0	0	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	17.8/8.9	Base Volt	460	R1	0.712	X1	2.680
HP	7.5	NL AMPS	3.53	R2	0.463	X2	2.170
BASE SPEED	1762	Slip (HZ)	1.27			XM	70.300
PHASE/HZ	3/60	WK2 (lb-ft2)	1.180				

Vector PWM Inverer Duty

Vaiable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

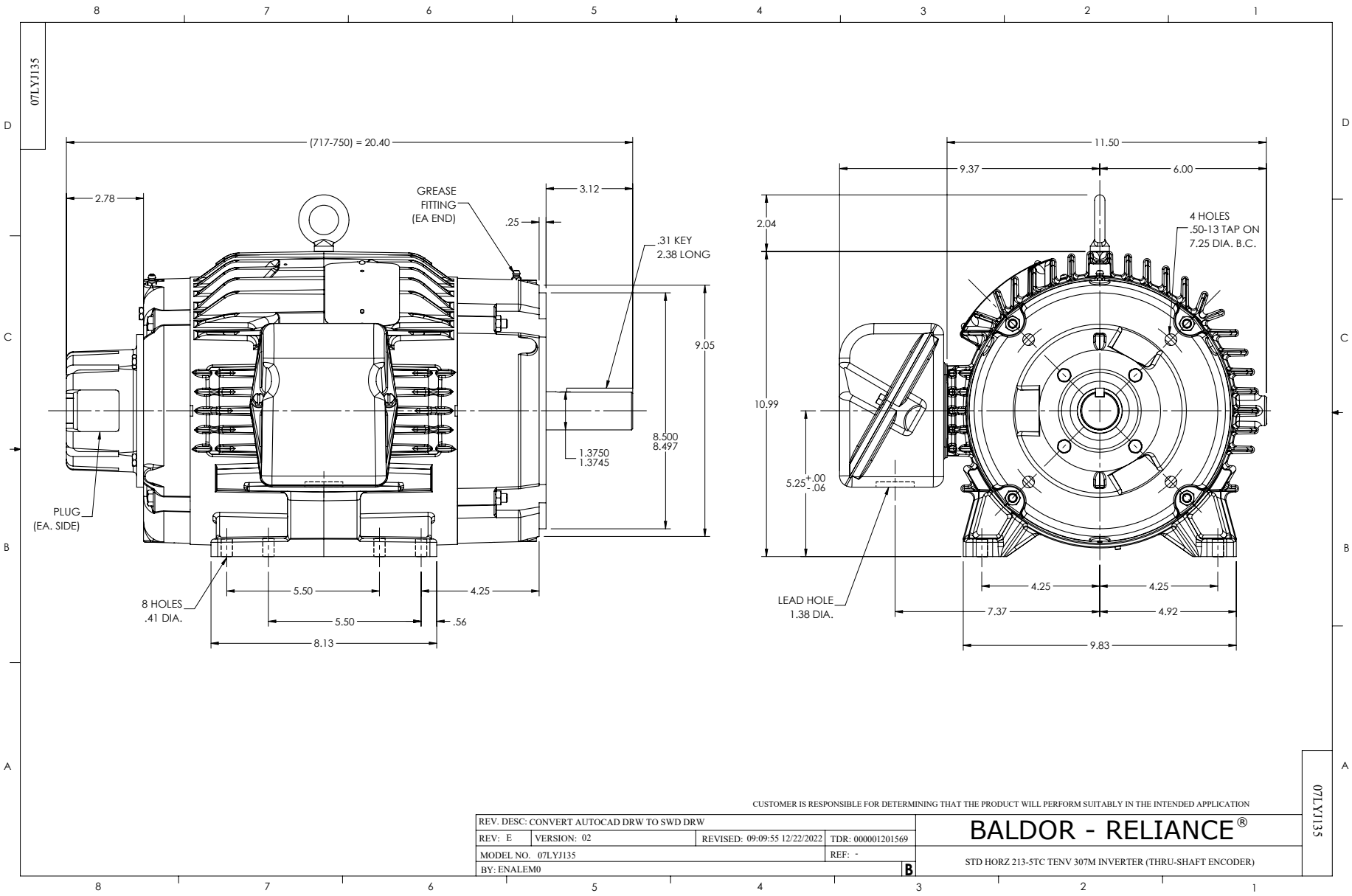
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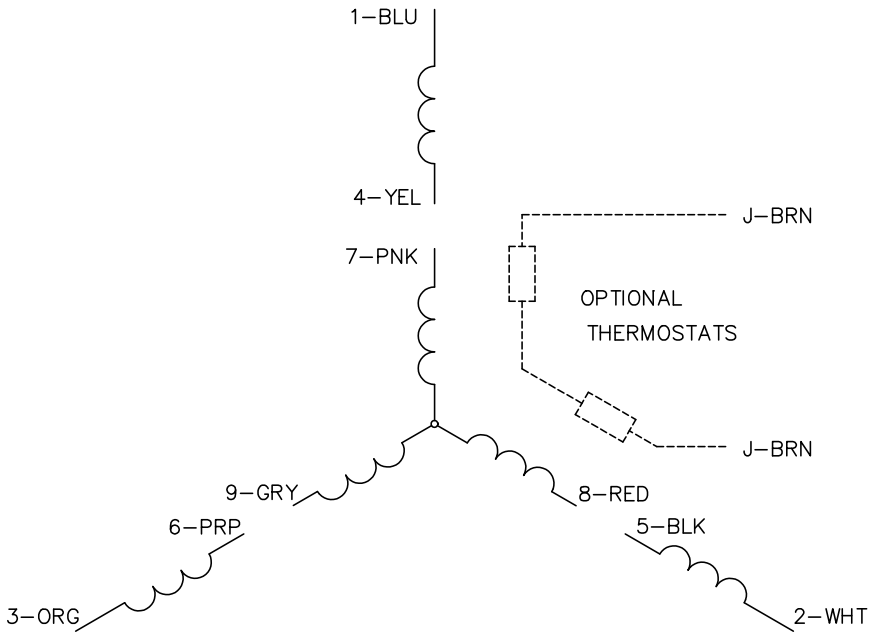
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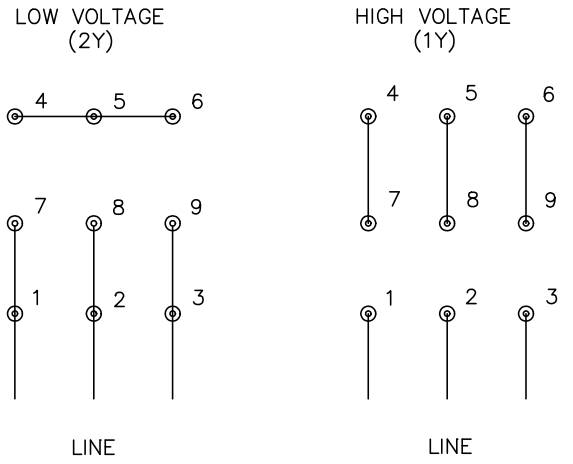
07WGX647

Record: 98905


07LYJ135
(717-750) = 20.40
2.78
GREASE FITTING (EA END)
.25
3.12
.31 KEY 2.38 LONG
9.05
8.500
8.497
1.3750
1.3745
PLUG (EA. SIDE)
8 HOLES .41 DIA.
5.50
4.25
5.50
.56
8.13
11.50
9.37
6.00
2.04
4 HOLES .50-13 TAP ON 7.25 DIA. B.C.
10.99
5.25 +.00 -.06
LEAD HOLE 1.38 DIA.
4.25
4.25
7.37
4.92
9.83
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRW TO SWD DRW
REV: E
VERSION: 02
REVISED: 09:09:55 12/22/2022
TDR: 000001201569
MODEL NO. 07LYJ135
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
STD HORZ 213-5TC TENV 307M INVERTER (THRU-SHAFT ENCODER)
07LYJ135

CD0005





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			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS