ABB BALDOR RELIANCE

Customer information packet

IDVSNM2237T-5

7.5HP, 1770RPM, 3PH, 60HZ, 0748M, N
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	575.0 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	7.800 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	No Key Or Flat
Heater Indicator	No Heater
High Voltage Full Load Amps	7.8 a
Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	H

Part Detail

Revision	-
Type	AC
Mech. spec.	07M290
Base	
Status	PRD/A
Elec. spec.	07WGY729
Layout	07LYM290
Eff. date	11-20-2020
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	11-19-2020

Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0748M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.86 IN
Power Factor	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP3301L							
CAT NO	IDVSNM2237T-5						
SPEC.	07M290Y729G1						
FRAME	213TC		**HP**	7.5 TE			
VOLTS	575						
MAG CUR	4				**FLA**	7.8	
RPM	1770		**RPM MAX**	2700			
HZ	60	**PH**	3		**CLASS**	H	
SER.F.	1.00			**SL HZ**	1		
NEMA-NOM-EFF	91.7		**WK2**	1.18			
RATING	40C AMB-CONT						
DE BRG	6307		**ODE BRG**	6206			
CC		**SN**					
	1.5:1 CHP PWM						

				WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP VOLTS	575						
NP AMPS	7.8	Base Volt	575	R1	0.887	X1	3.360
HP	7.5	NL AMPS	4.00	R2	0.581	X2	2.710
BASE SPEED	1773	Slip (HZ)	0.90			XM	85.200
PHASE/HZ	3/60	WK^2 (lb-ft^2)	1.180				

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1773	7.5	22.2	575	60	7.8
Max Speed	2659	7.5	14.8	575	90	7.3
CT Min Speed	1.773	0.007	22.2	0.58	0.06	7.8

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	575	60	4.0
1/4	1793	1.9	5.5	575	60	4.4
1/2	1787	3.7	10.9	575	60	5.2
3/4	1780	5.6	16.6	575	60	6.4
Full Load	1773	7.5	22.2	575	60	7.8
O/L	1748	15.0	44.9	575	60	14.7

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

Remarks: Calculated Data

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DR BY USBRRAN1
CK BY CD
APP BY USBRRAN1
DATE 11/1/2024

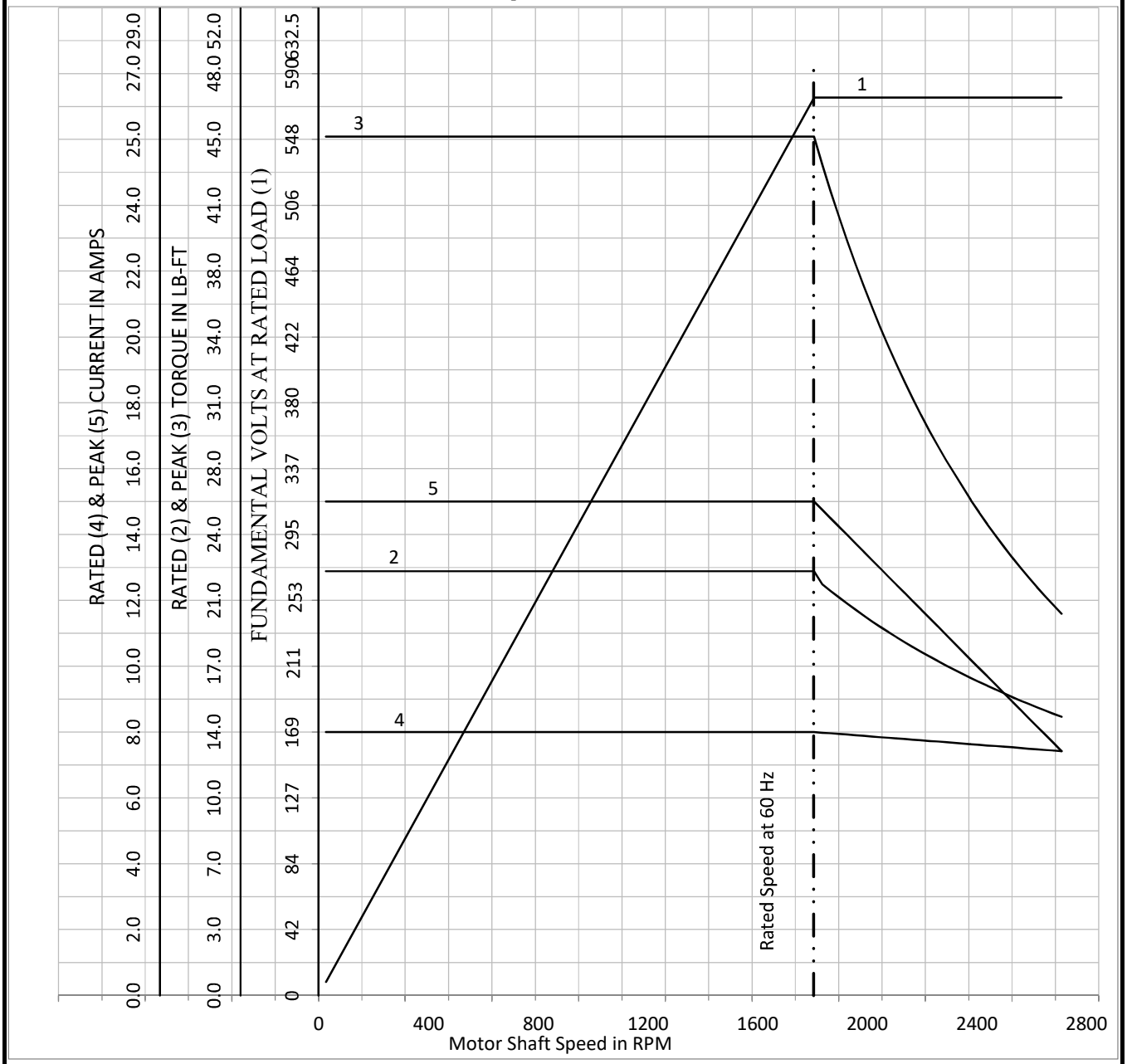
A-C MOTOR PERFORMANCE CURVES

07WGY729

Record: 85520

				WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP VOLTS	575			R1	0.887	X1	3.360
NP AMPS	7.8	Base Volt	575	R2	0.581	X2	2.710
HP	7.5	NL AMPS	4.00			XM	85.200
BASE SPEED	1773	Slip (HZ)	0.90				
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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A-C MOTOR PERFORMANCE CURVES

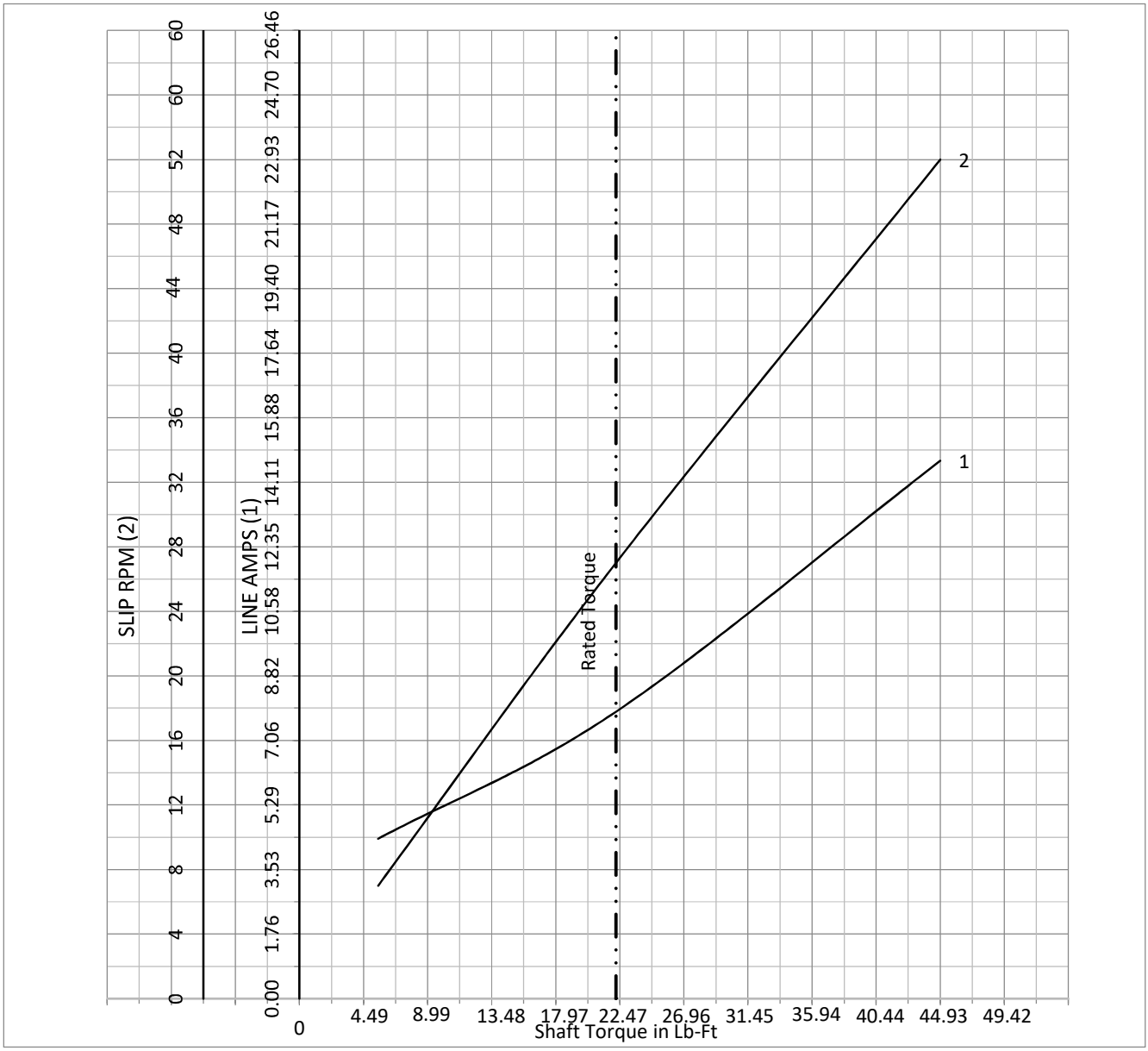
07WGY729

Record: 85520

NP VOLTS	575	0	0	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	7.8	Base Volt	575	R1	0.887	X1	3.360
HP	7.5	NL AMPS	4.00	R2	0.581	X2	2.710
BASE SPEED	1773	Slip (HZ)	0.90			XM	85.200
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

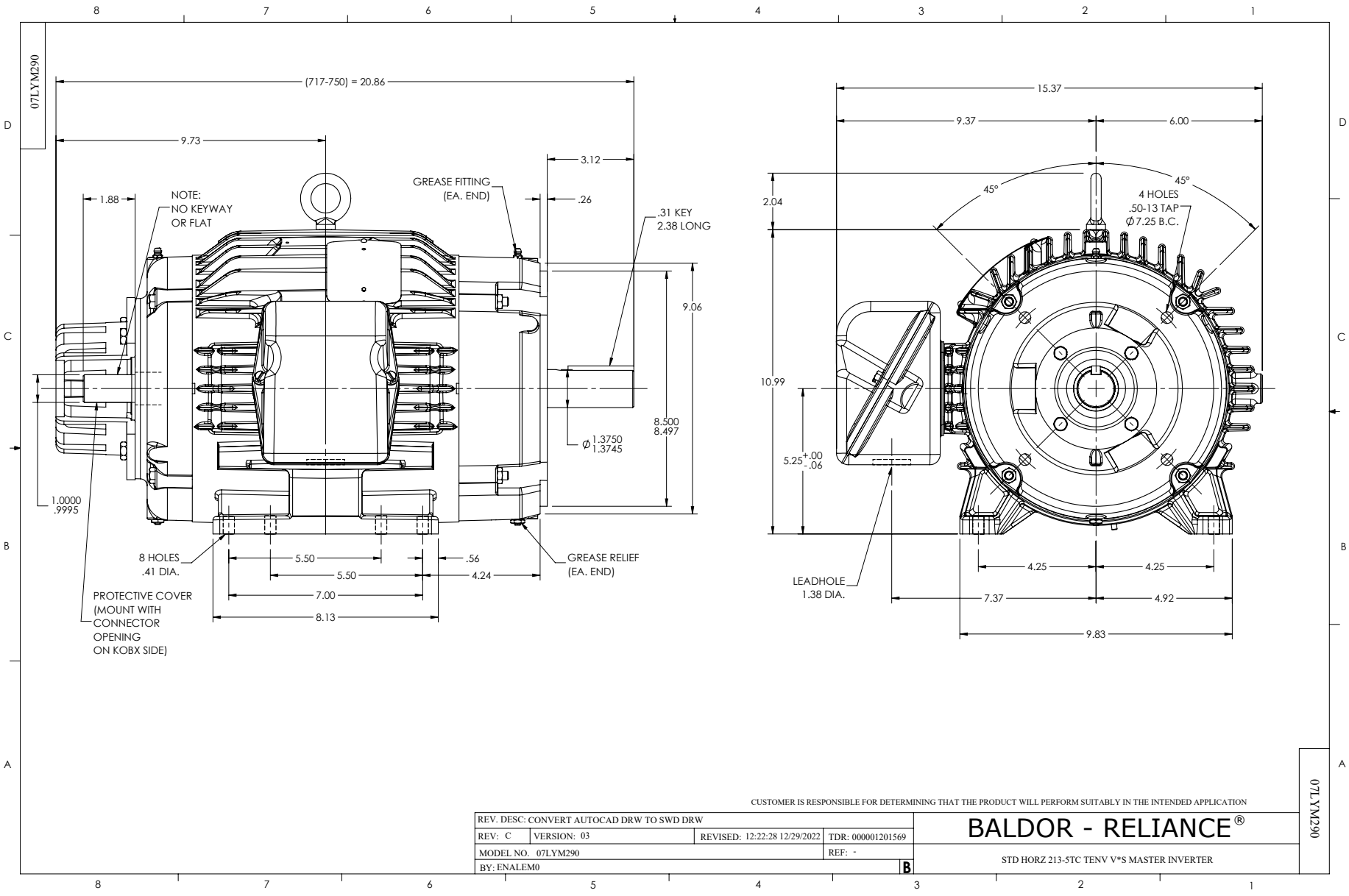
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DATE 11/1/2024

A-C MOTOR PERFORMANCE CURVES

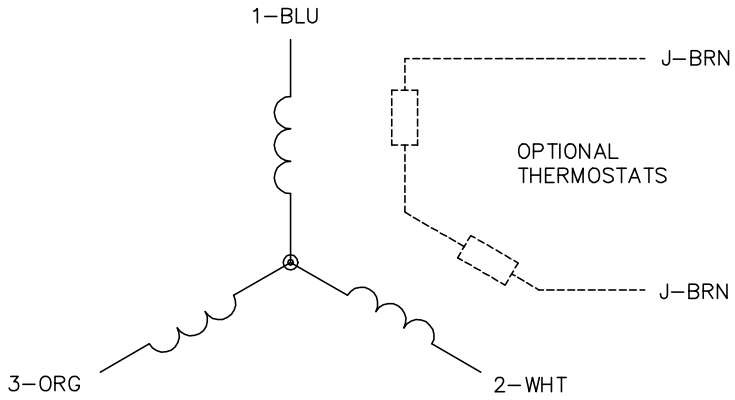
07WGY729

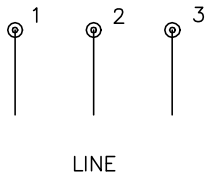
Record: 85520


07LYM290
(717-750) = 20.86
9.73
3.12
1.88
NOTE:
NO KEYWAY
OR FLAT
GREASE FITTING
(EA. END)
.26
.31 KEY
2.38 LONG
9.06
8.500
8.497
Ø 1.3750
1.3745
1.0000
.9995
8 HOLES
.41 DIA.
5.50
5.50
.56
4.24
7.00
8.13
GREASE RELIEF
(EA. END)
PROTECTIVE COVER
(MOUNT WITH
CONNECTOR
OPENING
ON KOBX SIDE)
15.37
9.37
6.00
45°
45°
4 HOLES
.50-13 TAP
Ø 7.25 B.C.
2.04
10.99
5.25 +.00 -.06
LEADHOLE
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: C
VERSION: 03
REVISED: 12:22:28 12/29/2022
TDR: 000001201569
MODEL NO. 07LYM290
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
STD HORZ 213-5TC TENV V*S MASTER INVERTER
07LYM290

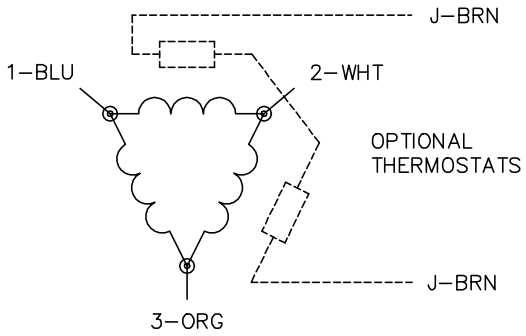
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER 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 BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1