ABB BALDOR RELIANCE

Customer information packet

EM2540T-G

40HP, 1180RPM, 3PH, 60HZ, 364T, 4278M, OPSB, F1

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Specifications

Enclosure	OPSB
Frame	364T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA
	CSA EEV
	UR
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	110.000 A @ 208.0 V
	51.000 A @ 460.0 V
	104.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
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	51.0 a

Part Detail

Revision	T
Type	AC
Mech. spec.	42E260
Base	
Status	PRD/A
Elec. spec.	42WGW920
Layout	42LYE260
Eff. date	11-29-2023
CD Diagram	CD0005
Poles	06
Leads	9#8
Proprietary	False
Created date	11-30-2011

Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4278M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	30.69 IN
Power Factor	79
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	2.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1180 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

NP2138LUA												
CAT.NO.	EM2540T-G			**P/N**				**ENCLOSURE**	OPSB			
SPEC.	42E260W920G1	**CC**	010A		**FRAME**	364T		**S/N**				
HP	40			**CLASS**	H		**HZ**	60				
RPM	1180			**PH**	3		**DES**	A				
VOLT	230/460				**KVA-CODE**	H		**ODE BRG**	6311	**DE BRG**	6313	
AMP	104/51											
RATING	40C AMB-CONT				**GREASE**	POLYREX EM						
NEMA-NOM-EFF	94.1	**PF**	79	**SER.F.**	1.15							
	50HZ 40HP 190/380V 120/60A							SF1.0				
HTR-VOLTS		**HTR-AMPS**										

Parts List

Part number	Description	Quantity
SA235118	SA 42E260W920G1	1.000 ea
RA222081	RA 42E260W920G1	1.000 ea
HA6360	LIFTING LUG FOR 42 FRAME MOTORS.	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
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	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
10CB3002	CONDUIT BOX CAST W/3.625 LEAD HOLE	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
42EP3200A01	FR ENDPLATE, MACH	1.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
42EP1202A01	STD PU ENDPLATE MODEL 42 313 BRG.	1.000 ea
10XN3816K44	3/8-16 X 2.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	8.000 ea
10CB3500	CONDUIT BOX LID, CAST	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501J37	KEY, 5/8 SQ X 4.375	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 ea

42AD2001A01	BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS	1.000 ea
HA3151A12	THRUBOLT STUD 1/2-13 X 23.00	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP2138LUA	ALUM SUPER-E UL PREM CC (300SER)	1.000 ea
42PA1000	PACKAGING GROUP PRINT PK1024A08	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data
Record # 36099
Typical performance - not guaranteed values

Winding: 42WGW920-R002	**Type:** 4278M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			40	**Full Load Torque**	178 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			104/51	**Breakdown Torque**	521 LB-FT
R.P.M.			1180	**Pull-up Torque**	232 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	317 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	337 A
Service Factor (S.F.)			1.15	**No-load Current**	21.9 A
NEMA Nom. Eff.	94.1	**Power Factor**	79	**Line-line Res. @ 25ºC**	0.154 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	41°C
S.F. Amps				**Temp. Rise @ S.F. Load**	50°C
				Locked-rotor Power Factor	28
				Rotor inertia	14.9 LB-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	43	64	74	79	81	82	80
Efficiency	89.3	93.1	94.1	94.1	93.3	92.2	93.6
Speed	1195	1191	1187	1183	1177	1170	1179
Line amperes	24.8	31.6	40.5	50.9	62.2	77.5	57.7

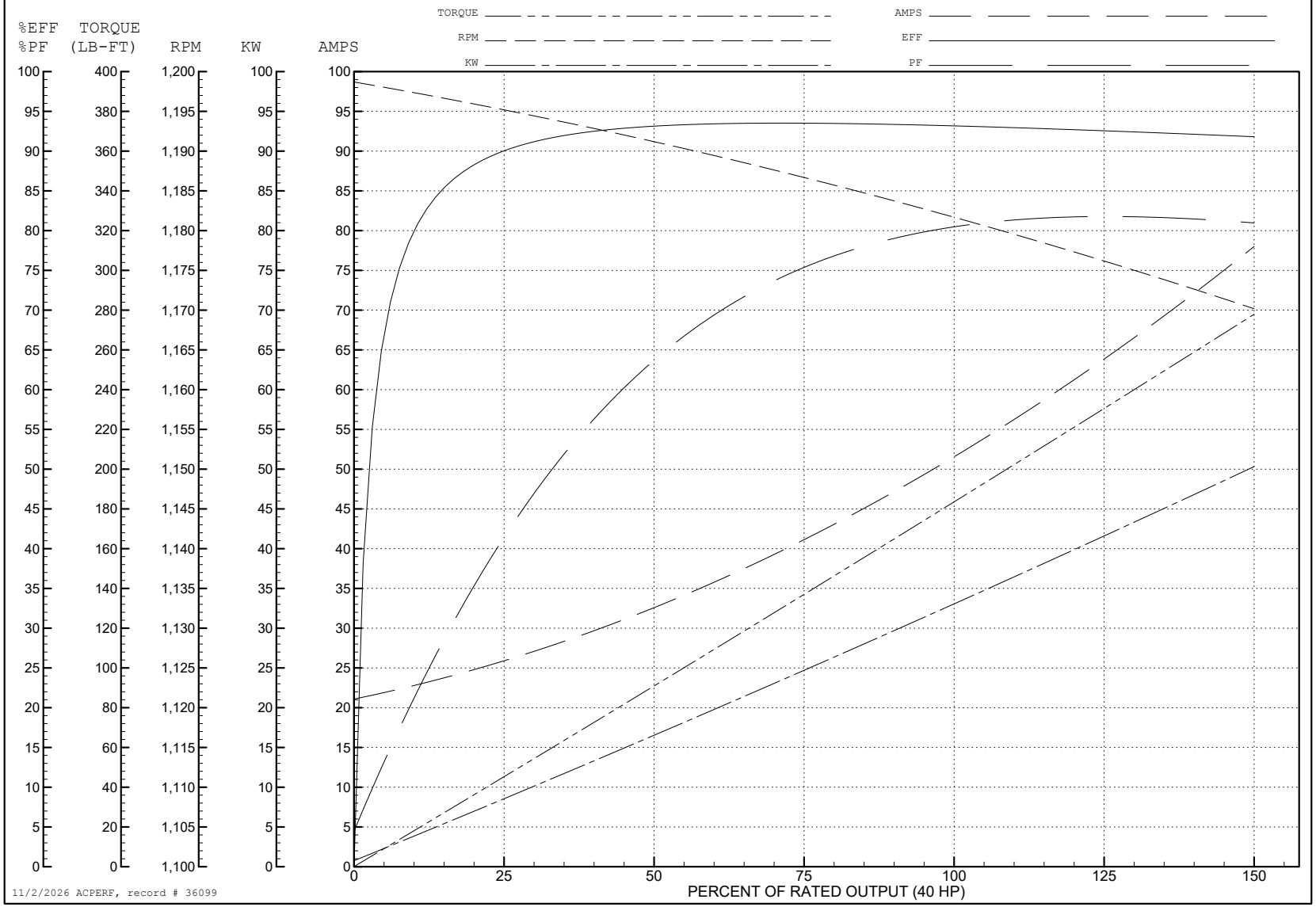
ABB Motors and Mechanical Inc.

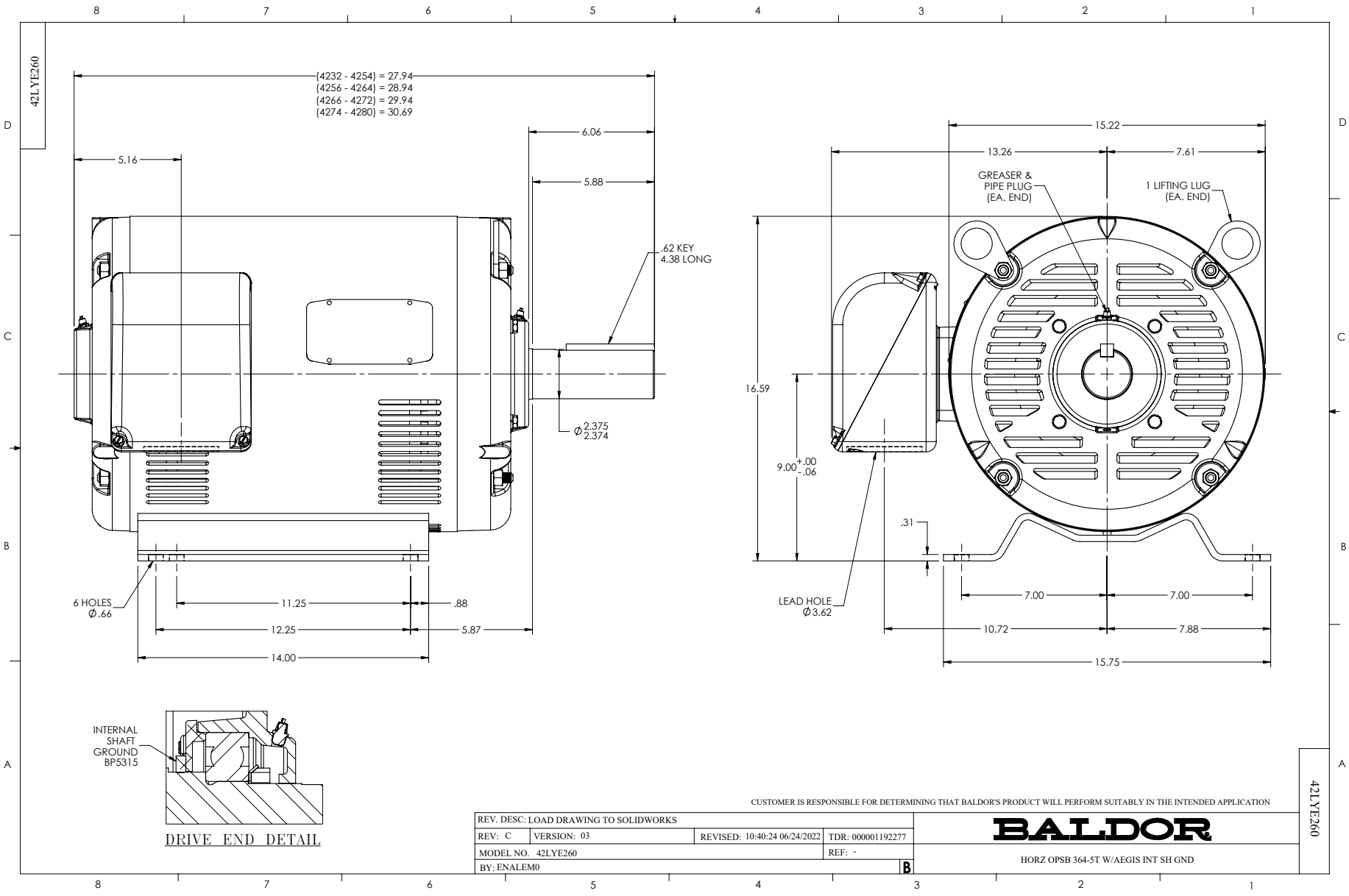
WINDING # 42WGW920

40 HP 3 PH 60 HZ 1180 RPM 460 V 4278M

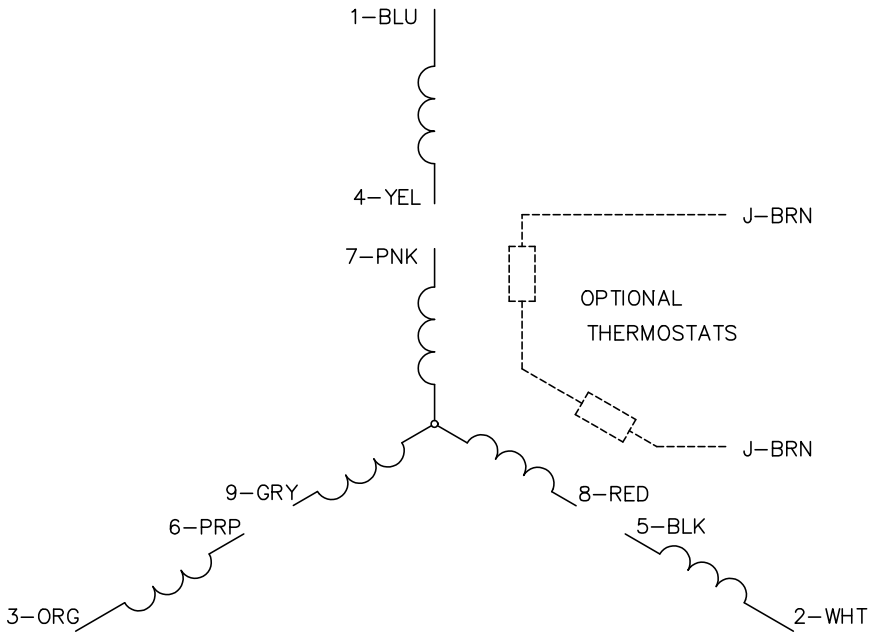
Typical performance - not guaranteed values.

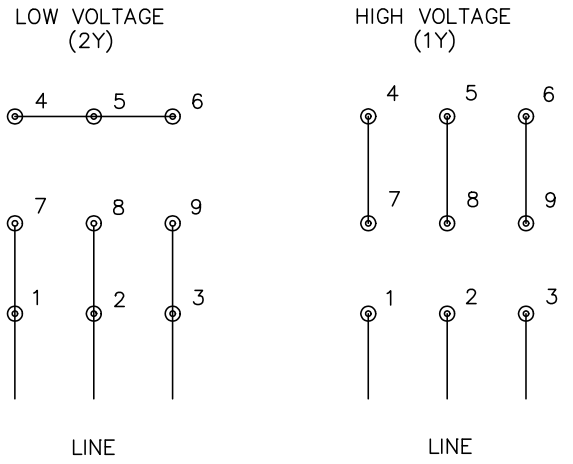
TORQUES(LB-FT): PO=521 PU=232 LR=317 LRA=337




42LYE260
(4232 - 4254) = 27.94
(4256 - 4264) = 28.94
(4266 - 4272) = 29.94
(4274 - 4280) = 30.69
5.16
6.06
5.88
.62 KEY
4.38 LONG
Ø2.375
2.374
6 HOLES
Ø.66
11.25
.88
12.25
5.87
14.00
15.22
13.26
7.61
GREASER &
PIPE PLUG
(EA. END)
1 LIFTING LUG
(EA. END)
16.59
9.00 +.00 -.06
.31
LEAD HOLE
Ø3.62
7.00
7.00
10.72
7.88
15.75
INTERNAL
SHAFT
GROUND
BP5315
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: C
VERSION: 03
REVISED: 10:40:24 06/24/2022
TDR: 000001192277
MODEL NO. 42LYE260
REF: -
BY: ENALEM0
B
BALDOR
HORZ OPSB 364-5T W/AEGIS INT SH GND
42LYE260

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