ABB BALDOR RELIANCE

Customer information packet

EHM2539T

40HP, 1770RPM, 3PH, 60HZ, 324T, 4064M, OPSB, F1

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Specifications

Enclosure	OPSB
Frame	324T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 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	CSA
	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	49.000 A @ 460.0 V
	98.000 A @ 230.0 V
	99.000 A @ 208.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	49.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	M
Type	AC
Mech. spec.	40E329
Base	
Status	PRD/A
Elec. spec.	40WGX166
Layout	40LYE329
Eff. date	07-10-2024
CD Diagram	CD0005
Poles	04
Leads	9#8
Proprietary	False
Created date	09-30-2013

KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No 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	4064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.19 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	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Mounting Provisions Only
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	None
Vibration Sensor Indicator	No Vibration Sensor

Nameplate

NP2094E06B03											
CAT.NO.	EHM2539T										
SPEC.	40E329X166G1										
HP	40										
VOLTS	230/460										
AMPS	98/49										
RPM	1770										
FRAME	324T		**HZ**	60			**PH**	3			
SER.F.	1.15	**CODE**	H	**DES**	A	**CL**	F				
NEMA-NOM-EFF	94.1	**PF**	82								
RATING	40C AMB-CONT										
CC	010A			**USABLE AT 208V**			N/A				
DE	6312		**ODE**	6309							
AUTO		**MANUAL**			**NONE**						
ENCL	OPSB	**SN**									
BLANK											

Parts List

Part number	Description	Quantity
SA269920	SA 40E329X166G1	1.000 ea
RA256564	RA 40E329X166G1	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
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
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
40EP3200A02	STD FREP OPEN 309 BRG	1.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
40EP3201A09	PU ENDPLATE, MACH - OPEN - FOR 312 BRG	1.000 ea
84XN0632J08	#6-32 X .50 SOCK HD, BK OX	2.000 ea
84XN0540J08	5-40 X 1/2" SHCS, BLACK OXIDE	2.000 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
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.030 ga
HA3159A08	THRUBOLT- .38-16 X 20.00 LONG STUD	4.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP2094E06B03	NP LABEL W/BARCODE (PREM EFF HVAC MTR)	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea

FE-0000022	ZRTG FE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data
Record # 31313
Typical performance - not guaranteed values

Winding: 40WGX166-R002	**Type:** 4064M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			40	**Full Load Torque**	119 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			98/49	**Breakdown Torque**	427 LB-FT
R.P.M.			1770	**Pull-up Torque**	187 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	246 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	330 A
Service Factor (S.F.)			1.15	**No-load Current**	21.1 A
NEMA Nom. Eff.	94.1	**Power Factor**	82	**Line-line Res. @ 25ºC**	0.16236 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	41°C
S.F. Amps				**Temp. Rise @ S.F. Load**	51°C
				Locked-rotor Power Factor	31.9
				Rotor inertia	5.09 LB-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	43	65	76	82	85	85	84
Efficiency	91.1	94	94.5	94.2	93.6	92.8	93.8
Speed	1792.4	1785	1777.8	1770.2	1762.1	1752.8	1765
Line amperes	24.1	30.7	39.2	48.7	59.3	71.3	55.1

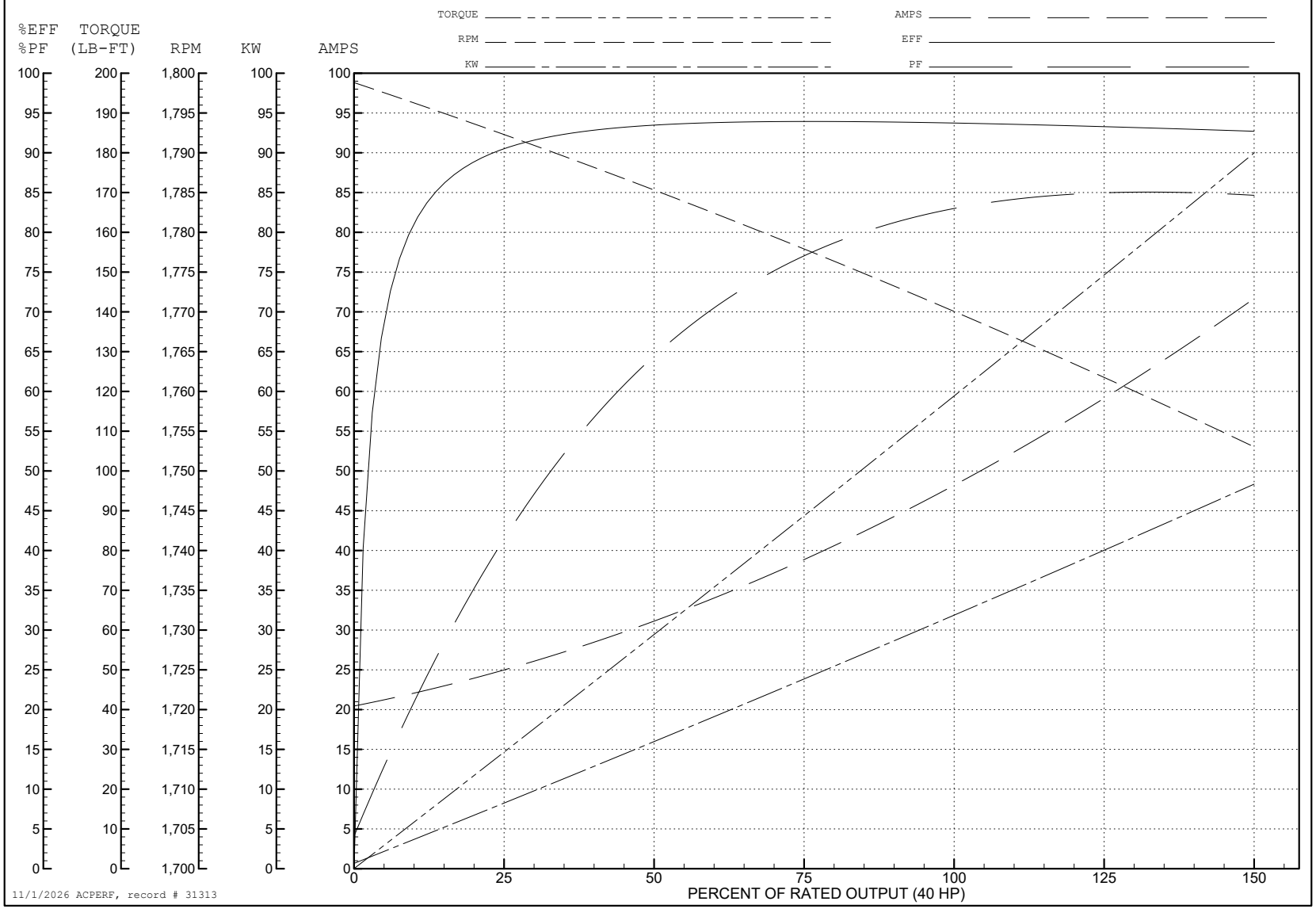
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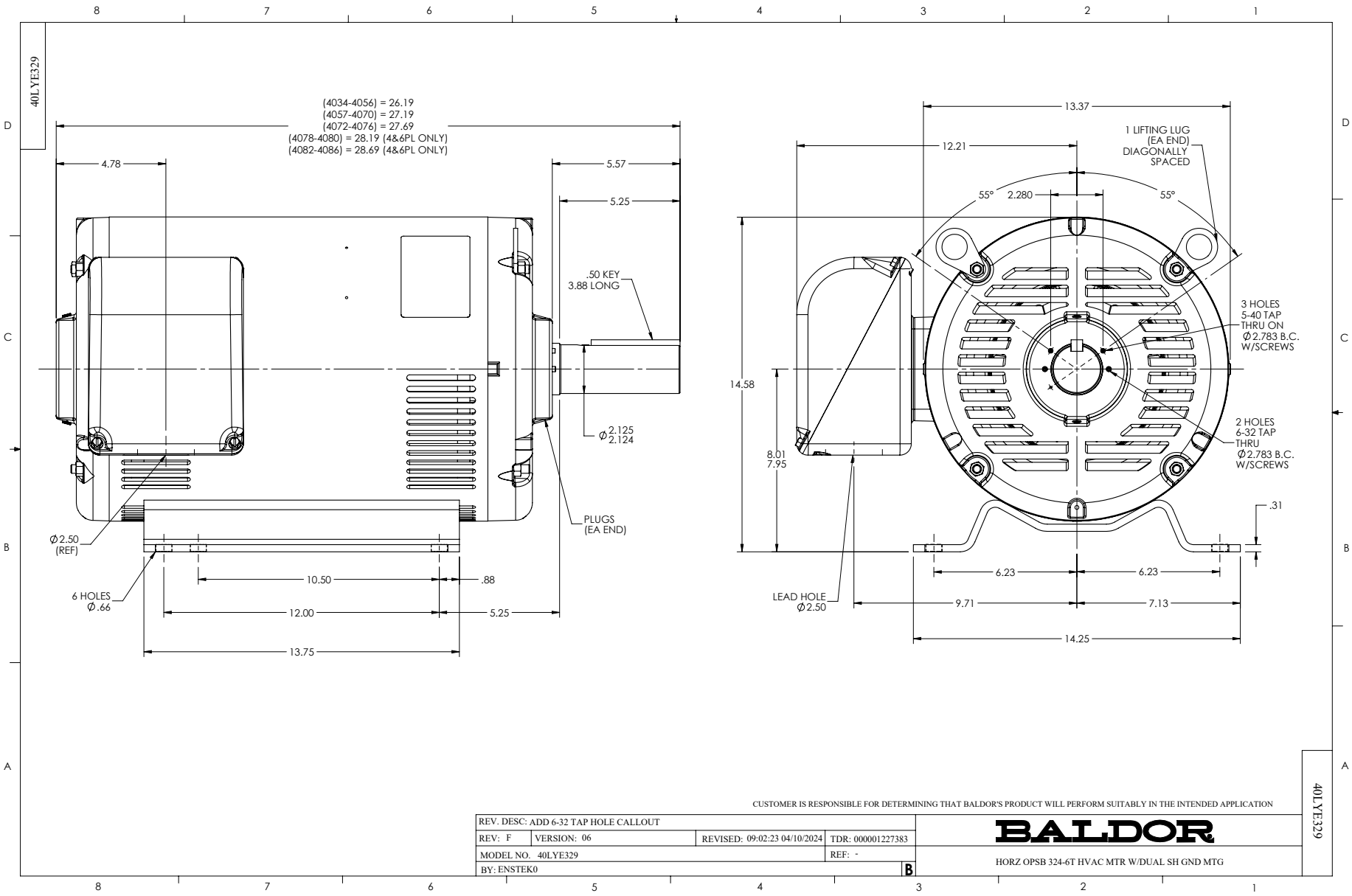
WINDING # 40WGX166

40 HP 3 PH 60 HZ 1770 RPM 460 V 4064M

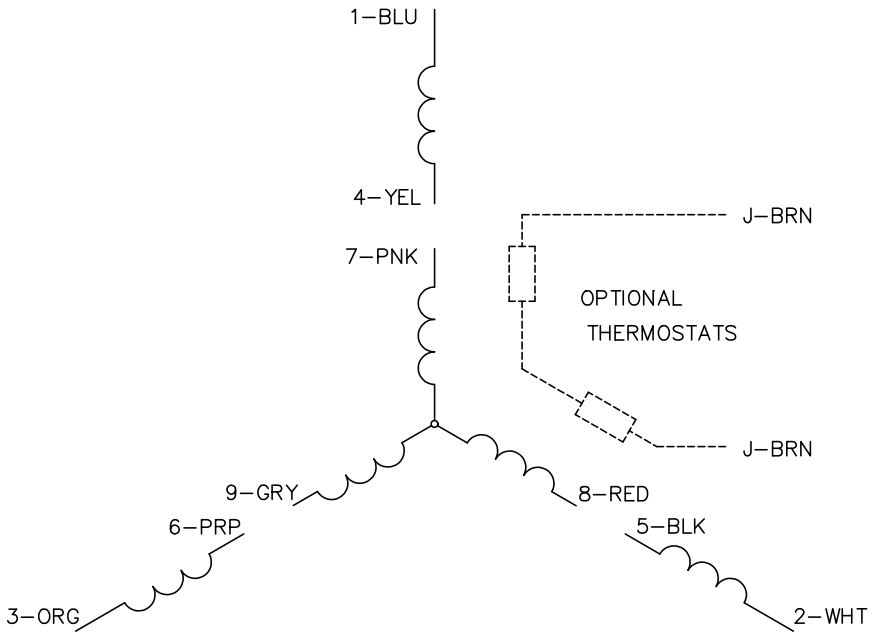
TORQUES(LB-FT): PO=427 PU=187 LR=246 LRA=330

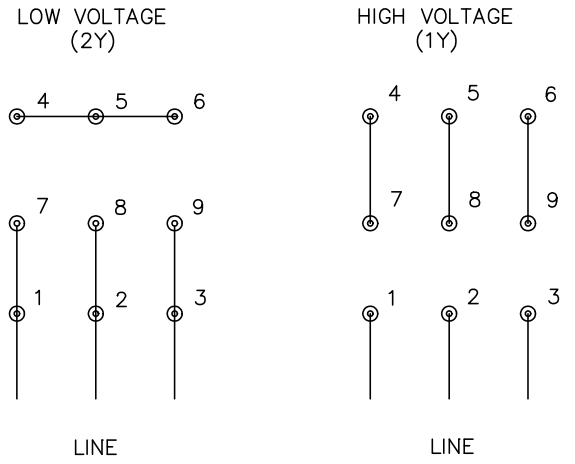
Typical performance - not guaranteed values.




40LYE329
(4034-4056) = 26.19
(4057-4070) = 27.19
(4072-4076) = 27.69
(4078-4080) = 28.19 (4&6PL ONLY)
(4082-4086) = 28.69 (4&6PL ONLY)
4.78
5.57
5.25
.50 KEY
3.88 LONG
Ø2.125
2.124
PLUGS
(EA END)
Ø2.50
(REF)
6 HOLES
Ø.66
10.50
.88
12.00
5.25
13.75
13.37
12.21
1 LIFTING LUG
(EA END)
DIAGONALLY
SPACED
55°
2.280
55°
3 HOLES
5-40 TAP
THRU ON
Ø2.783 B.C.
W/SCREWS
14.58
8.01
7.95
2 HOLES
6-32 TAP
THRU
Ø2.783 B.C.
W/SCREWS
.31
LEAD HOLE
Ø2.50
6.23
6.23
9.71
7.13
14.25
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD 6-32 TAP HOLE CALLOUT
REV: F
VERSION: 06
REVISED: 09:02:23 04/10/2024
TDR: 000001227383
MODEL NO. 40LYE329
REF: -
BY: ENSTEK0
B
BALDOR
HORZ OPSB 324-6T HVAC MTR W/DUAL SH GND MTG
40LYE329

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