ABB BALDOR RELIANCE

Customer information packet

EHM2531T

25HP, 1775RPM, 3PH, 60HZ, 284T, 4050M, OPSB, F1

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Specifications

Enclosure	OPSB
Frame	284T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	25.000 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	64.000 A @ 208.0 V
	60.000 A @ 230.0 V
	30.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	30.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	G
Type	AC
Mech. spec.	40J098
Base	
Status	PRD/A
Elec. spec.	40WGX806
Layout	40LYJ098
Eff. date	04-25-2025
CD Diagram	CD0005
Poles	04
Leads	9#10
Proprietary	False
Created date	02-10-2021

KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4050M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.06 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	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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

NP2094E06B03											
CAT.NO.	EHM2531T										
SPEC.	40J098X806G1										
HP	25										
VOLTS	230/460										
AMPS	60/30										
RPM	1775										
FRAME	284T		**HZ**	60			**PH**	3			
SER.F.	1.15	**CODE**	G	**DES**	A	**CL**	F				
NEMA-NOM-EFF	93.6	**PF**	82								
RATING	40C AMB-CONT										
CC	010A			**USABLE AT 208V**			N/A				
DE	6311		**ODE**	6309							
AUTO		**MANUAL**			**NONE**						
ENCL	OPSB	**SN**									
BLANK											

Parts List

Part number	Description	Quantity
SA390487	SA 40J098X806G1	1.000 ea
RA380938	RA 40J098X806G1	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
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
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
40EP3200A02	STD FREP OPEN 309 BRG	1.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
40EP3200B31	PUEP OPEN 311 BRG W/SH GND MTG	1.000 ea
84XN0632J08	#6-32 X .50 SOCK HD, BK OX	2.000 ea
84XN0540J08	5-40 X 1/2" SHCS, BLACK OXIDE	3.000 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
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
HA3154A04	THRUBOLT STUD 3/8-16 X 18.750	4.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.125 ga
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

MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data
Record # 86783
Typical performance - not guaranteed values

Winding: 40WGX806-R001	**Type:** 4050M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			25	**Full Load Torque**	73.81 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			60/30	**Breakdown Torque**	232 LB-FT
R.P.M.			1775	**Pull-up Torque**	116 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	133 LB-FT
NEMA Design Code	A	**KVA Code**	G	**Starting Current**	192 A
Service Factor (S.F.)			1.15	**No-load Current**	12.6 A
NEMA Nom. Eff.	93.6	**Power Factor**	82	**Line-line Res. @ 25ºC**	0.35407 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	28°C
S.F. Amps				**Temp. Rise @ S.F. Load**	34°C
				Locked-rotor Power Factor	35

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	67	78	82	85	85	84
Efficiency	89.4	93.1	93.8	93.6	93	92.1	93.2
Speed	1794.8	1789.5	1783.7	1777.6	1771	1763.2	1774
Line amperes	14.5	18.6	24.1	30.3	37.2	44.6	34.4

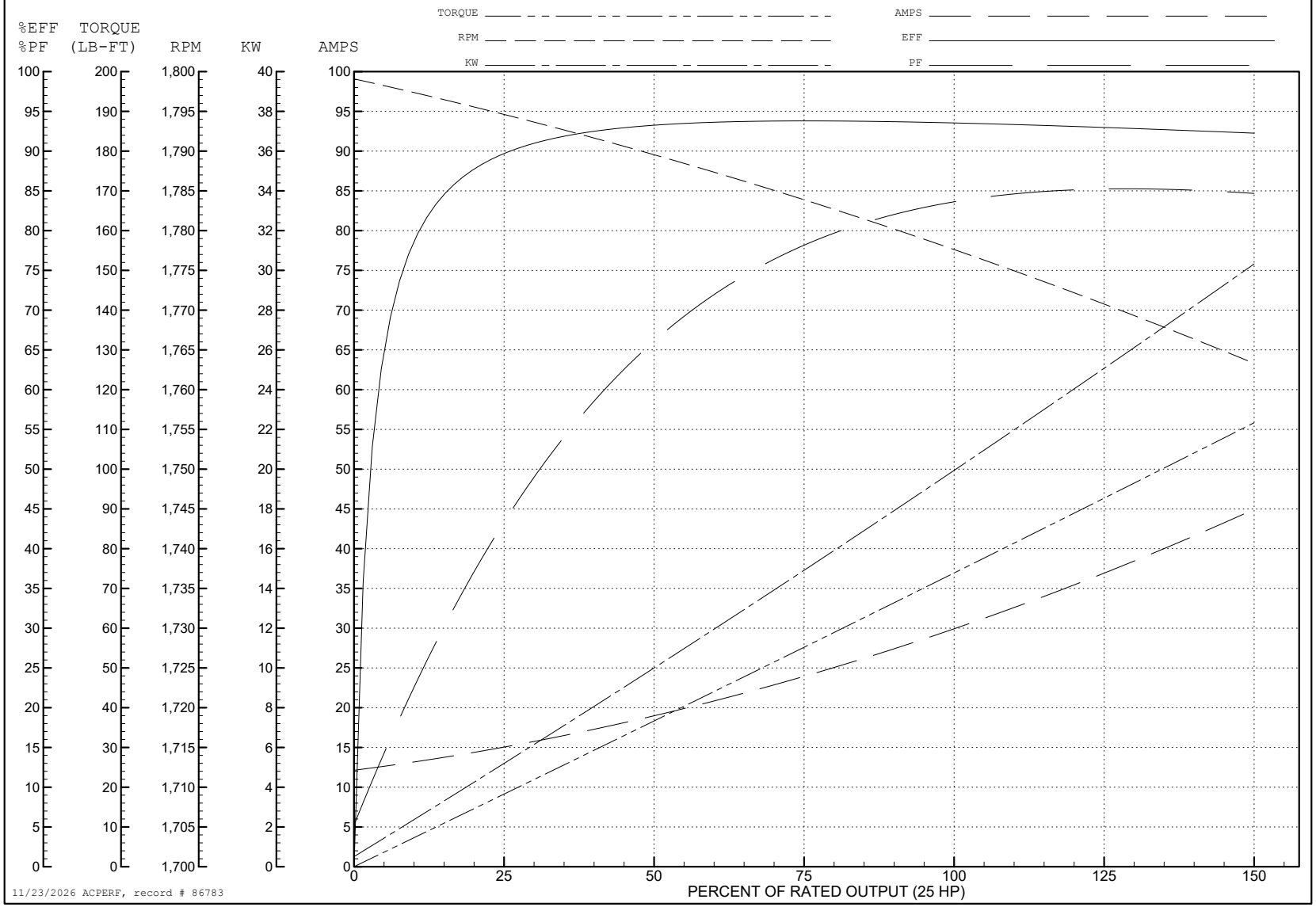
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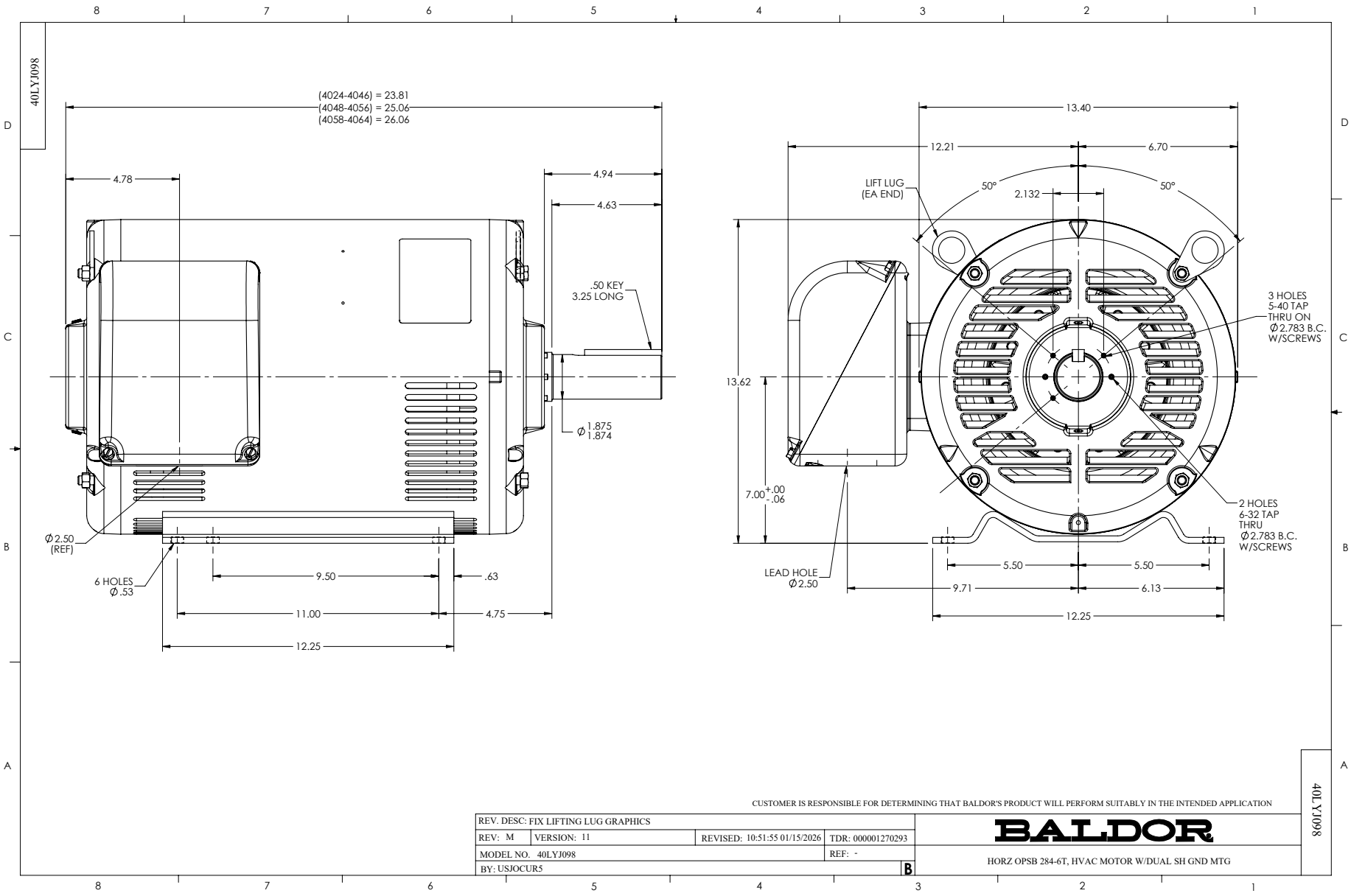
WINDING # 40WGX806

25 HP 3 PH 60 HZ 1775 RPM 460 V 4050M

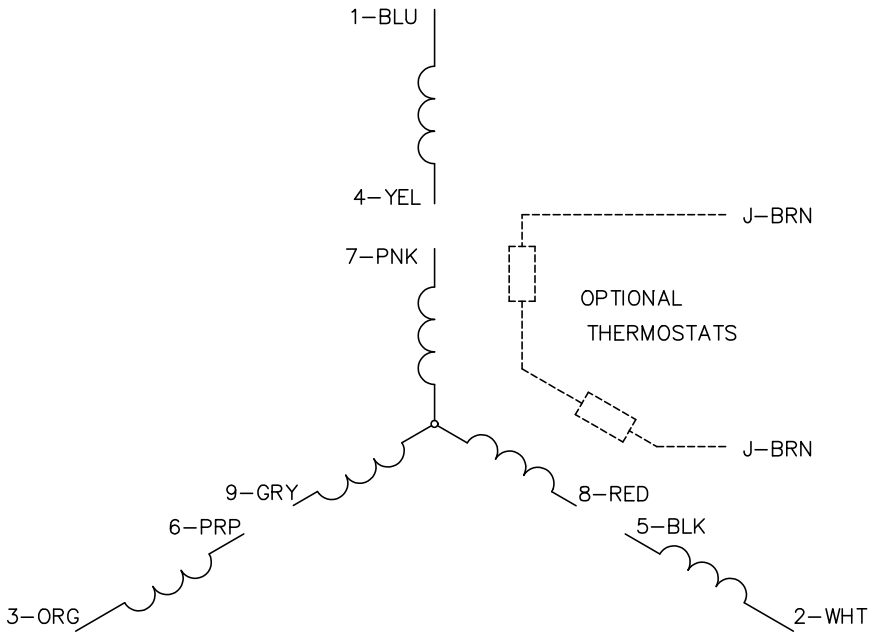
Typical performance - not guaranteed values.

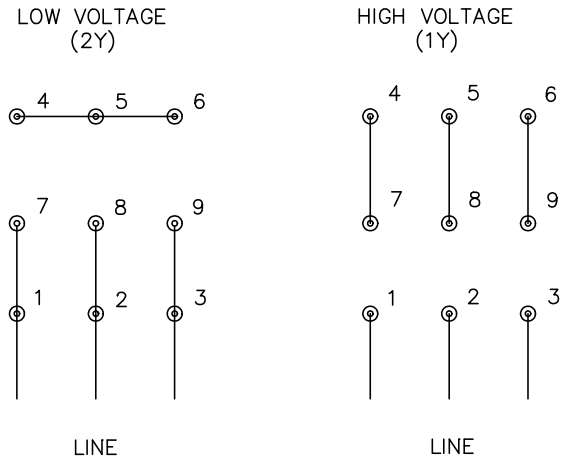
TORQUES(LB-FT): PO=232 PU=116 LR=133 LRA=192




40LYJ098
(4024-4046) = 23.81
(4048-4056) = 25.06
(4058-4064) = 26.06
4.78
4.94
4.63
.50 KEY
3.25 LONG
Ø1.875
1.874
Ø2.50
(REF)
6 HOLES
Ø.53
9.50
.63
11.00
4.75
12.25
13.40
12.21
6.70
LIFT LUG
(EA END)
50°
2.132
50°
3 HOLES
5-40 TAP
THRU ON
Ø2.783 B.C.
W/SCREWS
13.62
7.00 +.00 -.06
2 HOLES
6-32 TAP
THRU
Ø2.783 B.C.
W/SCREWS
LEAD HOLE
Ø2.50
5.50
5.50
9.71
6.13
12.25
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: FIX LIFTING LUG GRAPHICS
REV: M
VERSION: 11
REVISED: 10:51:55 01/15/2026
TDR: 000001270293
MODEL NO. 40LYJ098
REF: -
BY: USJOCUR5
B
BALDOR
HORZ OPSB 284-6T, HVAC MOTOR W/DUAL SH GND MTG
40LYJ098

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