ABB BALDOR RELIANCE

Customer information packet

EBM2334TY

20HP, 1770RPM, 3PH, 60HZ, 256T, 0960M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	256T
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	20.000 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	CURUSEEV
	NEMA PREMIUM
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	52.000 A @ 208.0 V
	48.000 A @ 230.0 V
	24.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Brake Mounting
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	T
Type	AC
Mech. spec.	09E427
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LYE427
Eff. date	08-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	11-17-2017

High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	32.71 IN
Power Factor	83
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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft 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
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1259L											
CAT.NO.	EBM2334TY										
SPEC.	09E427T459G2										
HP	20										
VOLTS	230/460										
AMP	48/24										
RPM	1770										
FRAME	256T	**HZ**	60				**PH**	3			
SER.F.	1.15	**CODE**	J	**DES**	A	**CL**	F				
NEMA-NOM-EFF	93	**PF**	83								
RATING	40C AMB-CONT										
CC	010A										
DE	6309	**ODE**	6308								
ENCL	TEFC	**SN**									
	SFA 54.4/27.2										

Parts List

Part number	Description	Quantity
SA347947	SA 09E427T459G2	1.000 ea
RA336506	RA 09E427T459G2	1.000 ea
HW3201A01	1/2-13 EYEBOLT	1.000 ea
HW1002A63	WASHER, 5/8 HI-COLLAR SPRLCKWASHER	1.000 ea
09CB3003	CB W/1.75" DIA LD HL - 37, 39, 307 & 309	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
09EP1101A11SP	PU ENDPLATE, MACH	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
09EP1301A100	PU/FR ENDPLATE, MACH	1.000 ea
HA3400A02	STUD- 3/8-16 X 5.25 HEX WELKER	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW5100A10	W3519-038 WAVY WASHER, FOR 6308 BRG	1.000 ea
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	2.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 ea
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
84XN5013L16	1/2-13X1 NYLOK TYP HX SOCHD CAP SCREW TD	4.000 ea
HW2501F16	KEY, 5/16 SQ X 1.750	1.000 ea
09FH4000A02	309 FH,PU END FH FOR BRAKE MTR	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 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
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 ea
ML1400B14	14 AWG,BLANK,BLACK	36.000 in

HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.080 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
09FN2003A09	EXTERNAL FAN, MACH	1.000 ea
80XN3118J10	5/16-18 X 5/8 SET SCREW, HEX SOC, CUP PT	2.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
87BK8100GQF	1-087-081-00-GQF BRAKE	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
42PA1010	PACKAGING GROUP, PRINT PK1151A08	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000003	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data
Record # 67948
Typical performance - not guaranteed values

Winding: 09WGT459-R001	**Type:** 0960M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			20	**Full Load Torque**	59.27 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			48/24	**Breakdown Torque**	232 LB-FT
R.P.M.			1770	**Pull-up Torque**	126 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	141 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	198 A
Service Factor (S.F.)			1.15	**No-load Current**	10.4 A
NEMA Nom. Eff.	93	**Power Factor**	83	**Line-line Res. @ 25ºC**	0.33814 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	58°C
S.F. Amps				**Temp. Rise @ S.F. Load**	70°C
				Locked-rotor Power Factor	26.9

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	67	78	83	86	87	85
Efficiency	89.2	93	93.7	93.6	93.1	92.4	93.3
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3	1767
Line amperes	11.8	15	19.2	24	29.3	34.9	27.2

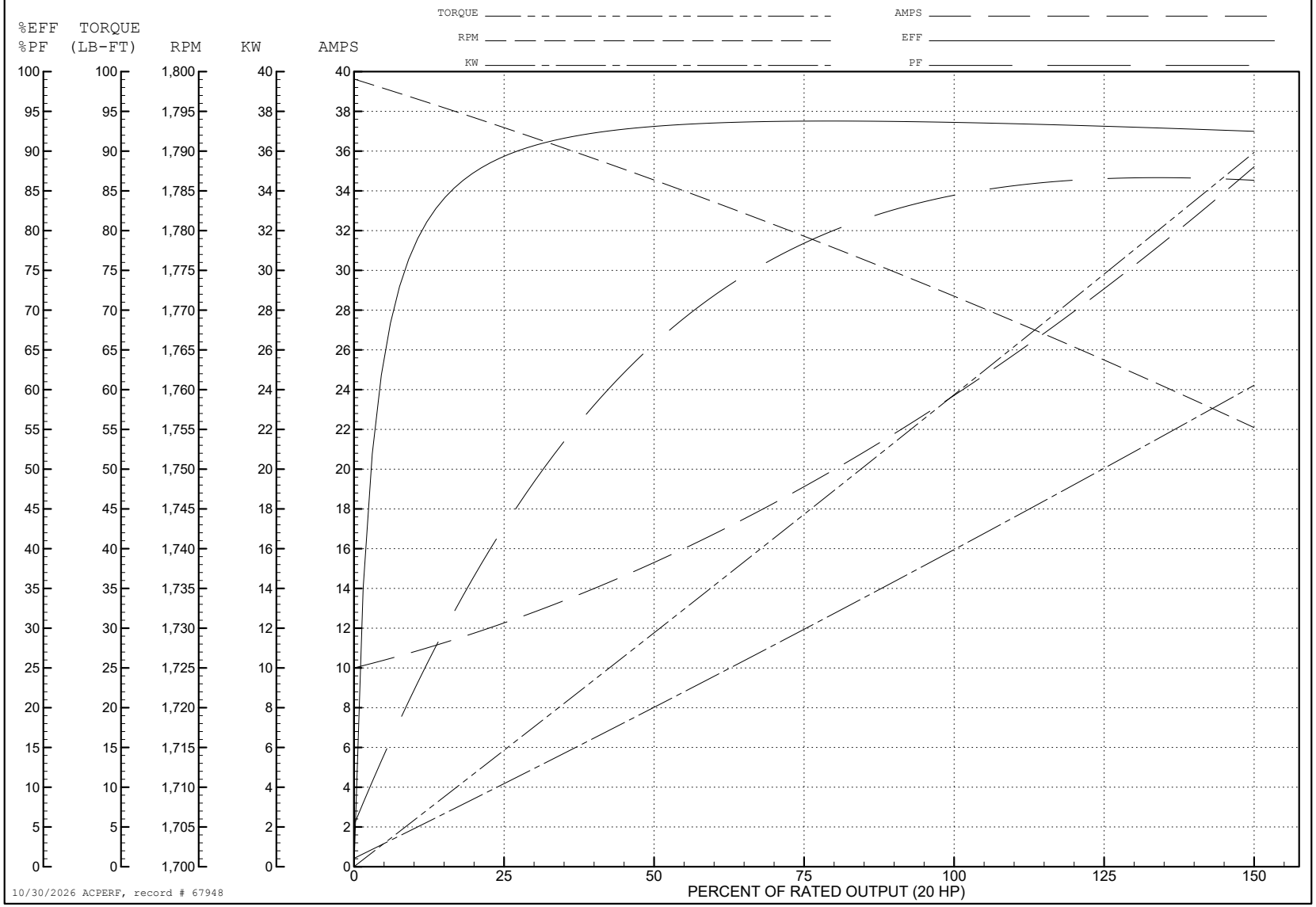
ABB Motors and Mechanical Inc.

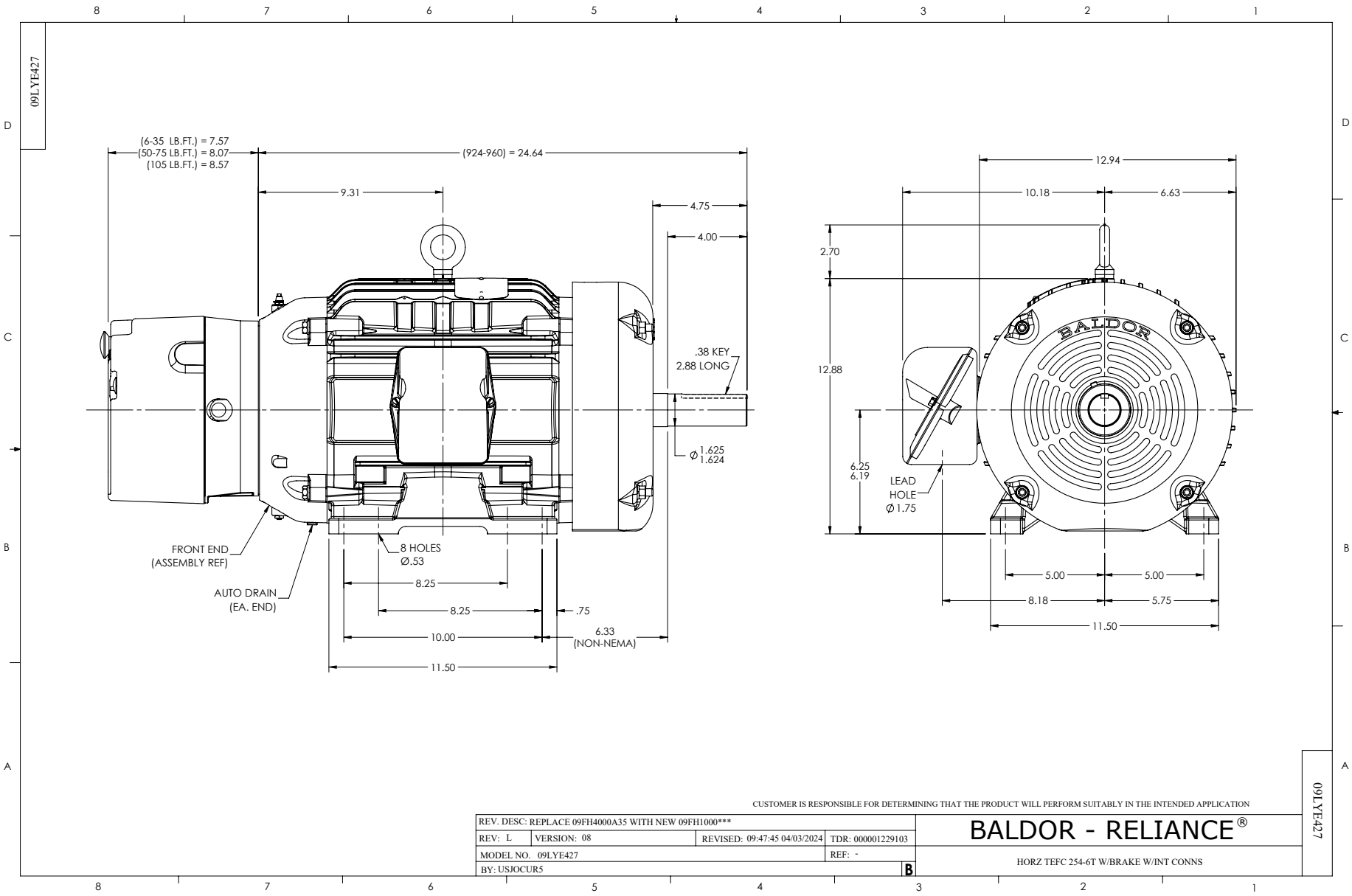
WINDING # 09WGT459

20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

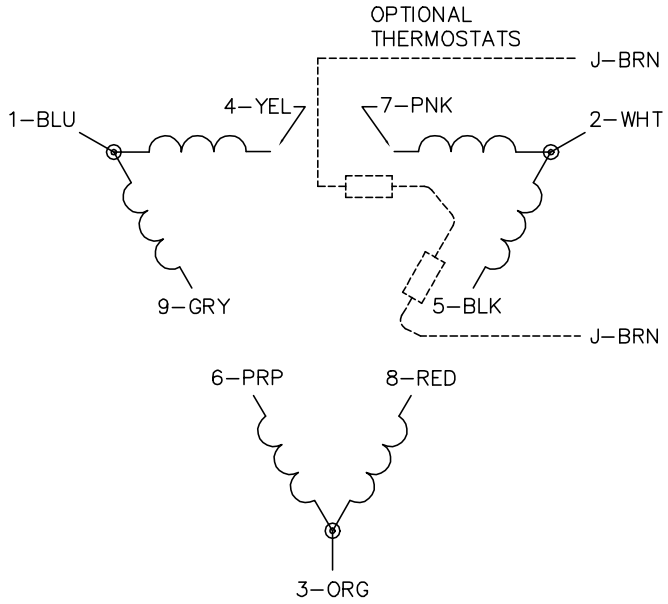
Typical performance - not guaranteed values.

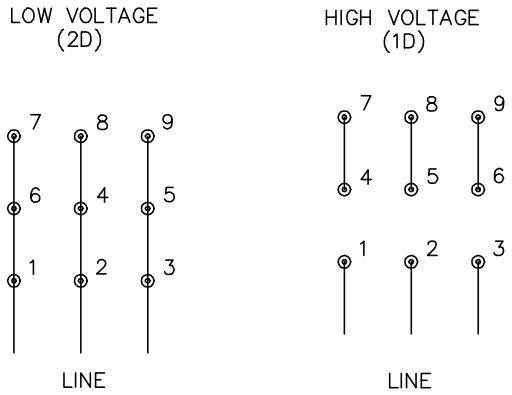
TORQUES(LB-FT): PO=232 PU=126 LR=141 LRA=198




09LYE427
(6-35 LB.FT.) = 7.57
(50-75 LB.FT.) = 8.07
(105 LB.FT.) = 8.57
(924-960) = 24.64
9.31
4.75
4.00
.38 KEY
2.88 LONG
Ø 1.625
1.624
FRONT END
(ASSEMBLY REF)
AUTO DRAIN
(EA. END)
8 HOLES
Ø.53
8.25
8.25
.75
10.00
6.33
(NON-NEMA)
11.50
12.94
10.18
6.63
2.70
12.88
BALDOR
6.25
6.19
LEAD
HOLE
Ø1.75
5.00
5.00
8.18
5.75
11.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: REPLACE 09FH4000A35 WITH NEW 09FH1000***
REV: L
VERSION: 08
REVISED: 09:47:45 04/03/2024
TDR: 000001229103
MODEL NO. 09LYE427
REF: -
BY: USJOCUR5
B
BALDOR - RELIANCE®
HORZ TEFC 254-6T W/BRAKE W/INT CONNS
09LYE427

CD0180





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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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