

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM7059T**

**20//15HP,3520//2930RPM,3PH,60//50HZ,256T**

Part Detail							
Revision:	V	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	09WGZ601	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	09E270	Layout:	09LYE270	Poles:	02	Created Date:	06-16-2010
Base:	RG	Eff. Date:	03-09-2020	Leads:	9#12		

Specs			
Catalog Number:	EM7059T	Heater Indicator:	No Heater
Enclosure:	XPFC	Insulation Class:	F
Frame:	256T	Inverter Code:	Not Inverter
Frame Material:	Iron	IP Rating:	NONE
Output @ Frequency:	15.000 HP @ 50 HZ	KVA Code:	H
	20.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 12 AWG
	380.0 V @ 50 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
	190.0 V @ 50 HZ	Motor Type:	X0936M
XP Class and Group:	CLI GP D; CLII GP F,G	Mounting Arrangement:	F1
XP Division:	Division I	Power Factor:	89
Agency Approvals:	CSA	Product Family:	Hazardous Location Motor
	UL	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	None
Base Indicator:	Rigid	Rodent Screen:	None

<b>Bearing Grease Type:</b>	Polyrex EM (-20F +300F)	<b>RoHS Status:</b>	ROHS COMPLIANT
<b>Blower:</b>	None	<b>Shaft Extension Location:</b>	Pulley End
<b>Current @ Voltage:</b>	46.000 A @ 230.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	42.000 A @ 190.0 V	<b>Shaft Rotation:</b>	Reversible
	23.000 A @ 460.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
	21.000 A @ 380.0 V	<b>Speed Code:</b>	Single Speed
<b>Design Code:</b>	A	<b>Motor Standards:</b>	NEMA
<b>Drip Cover:</b>	No Drip Cover	<b>Starting Method:</b>	Direct on line
<b>Duty Rating:</b>	CONT	<b>Thermal Device - Bearing:</b>	None
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Winding:</b>	Normally Closed Thermostat
<b>Feedback Device:</b>	NO FEEDBACK	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Face Code:</b>	Standard	<b>Winding Thermal 1:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 2:</b>	None
		<b>XP Temp Code:</b>	T3C

Nameplate NP1426XPSLEV	
NO.	[ ] CC 010A
SER.	[ ]
SPEC.	09E270Z601G1
CAT.NO.	EM7059T
HP	20//15 T. CODE T3C
VOLTS	230/460//190/380
AMPS	46/23//42/21
RPM	3520//2930
HZ	60//50 PH 3 CL F
SER.F.	1.00 DES A CODE H
RATING	40C AMB-CONT
FRAME	256T NEMA-NOM-EFF 91
USABLE AT 208V	PF 89
BLANK	[ ]

Parts List		
Part Number	Description	Quantity
SA198663	SA 09E270Z601G1	1.000 EA
RA186026	RA 09E270Z601G1	1.000 EA
37FN3002C02	EXFN, PLASTIC, 6.00 OD, 1.503 ID	1.000 EA
MJ5000A01	SEALANT, CHICO A COMPOUND	0.031 LB
09CB1000A57	CONDUIT BOX, MACH	1.000 EA
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 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
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 EA
09EP1700A01	FR ENDPLATE, MACH	1.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
HA2002A05	SPACER, #208 BRG	1.000 EA
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 EA
09EP1707A01	PU ENDPLATE, MACH	1.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
09FH1004A01	FAN COVER, MACH	1.000 EA
10XN2520K14	1/4-20 X .88 HEX GRD 5 (20001)	3.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	3.000 EA
09CB1500A01SP	CONDUIT BOX LID, MACH	1.000 EA
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	6.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	6.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1073	ALUM XP CAUTION LABEL	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 QT
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.080 LB
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1025G05	WILKOFASST, 789.227, MED. GRAY CHAR. MET.	0.050 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	6.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0145B01	CONNECTION LABEL	1.000 EA
NP1426XPSLEV	SS XP UL CSA-EEV CC CL-I GP-D	1.000 EA
40PA1005	PACKAGING GROUP, 09 STD	1.000 EA

**AC Induction Motor Performance Data**

Record # 53246 - Typical performance - not guaranteed values

<b>Winding:</b> 09WGZ601-R041	<b>Type:</b> 0936M	<b>Enclosure:</b> XPFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	20//15			Full Load Torque	29.6 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	46/23//42/21			Breakdown Torque	111 LB-FT
R.P.M.	3520//2930			Pull-up Torque	39.1 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	49.6 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	161 A
Service Factor (S.F.)	1			No-load Current	7.17 A
NEMA Nom. Eff.	91	Power Factor	89	Line-line Res. @ 25°C	0.47592 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	76°C
				Locked-rotor Power Factor	29
				Rotor inertia	0.92 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	58	78	86	89	90	90
Efficiency	88.9	92.2	92.4	91.7	90.7	89.2
Speed	3579.6	3561.5	3541.3	3519.5	3495.4	3467.8
Line amperes	9	13	17.7	22.9	28.6	35

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values

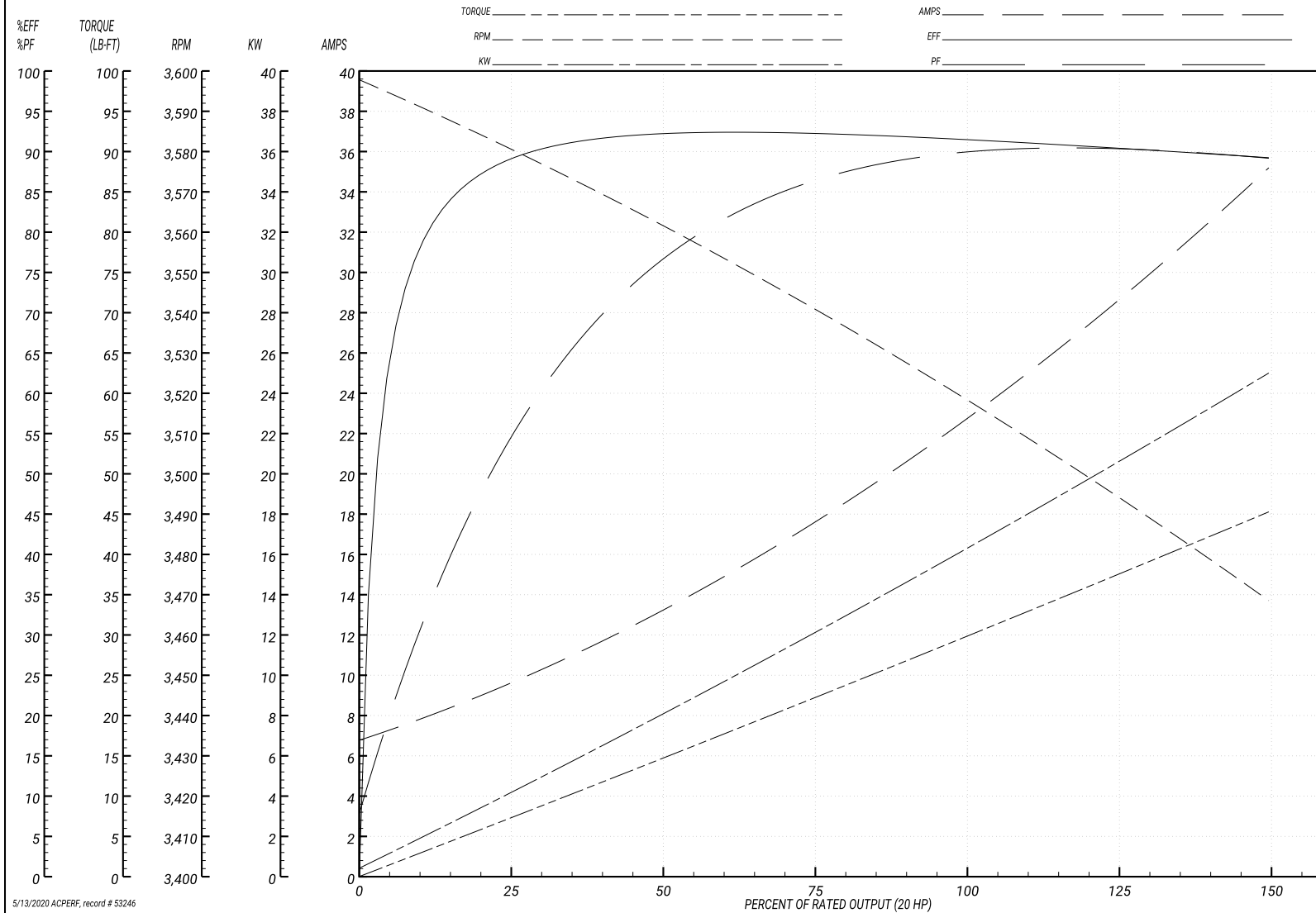
ABB Motors and Mechanical Inc.

WINDING # 09WGZ601

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3519.5 RPM 460 V 0936M

TORQUES(LB-FT): PO=111 PU=39.1 LR=49.6 LRA=161



5/13/2020 ACPERF, record # 53246

**AC Induction Motor Performance Data**

Record # 53247 - Typical performance - not guaranteed values

<b>Winding:</b> 09WGZ601-R041	<b>Type:</b> 0936M	<b>Enclosure:</b> XPFC
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Nameplate Data				380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	20//15			Full Load Torque	26.7 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	46/23//42/21			Breakdown Torque	106 LB-FT
R.P.M.	3520//2930			Pull-up Torque	41.4 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	52.5 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	157 A
Service Factor (S.F.)	1			No-load Current	6.99 A
NEMA Nom. Eff.	91	Power Factor	89	Line-line Res. @ 25°C	0.447 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	67°C
				Locked-rotor Power Factor	33
				Rotor inertia	0.92 LB-FT <sup>2</sup>

Load Characteristics 380 V, 50 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	55	76	85	88	90	90
Efficiency	88.8	92	92.1	91.3	90.2	88.7
Speed	2982	2966	2947	2928	2907	2882
Line amperes	8.55	12	16.3	21	26.1	31.8

Performance Graph at 380V, 50Hz, 15.0HP Typical performance - Not guaranteed values

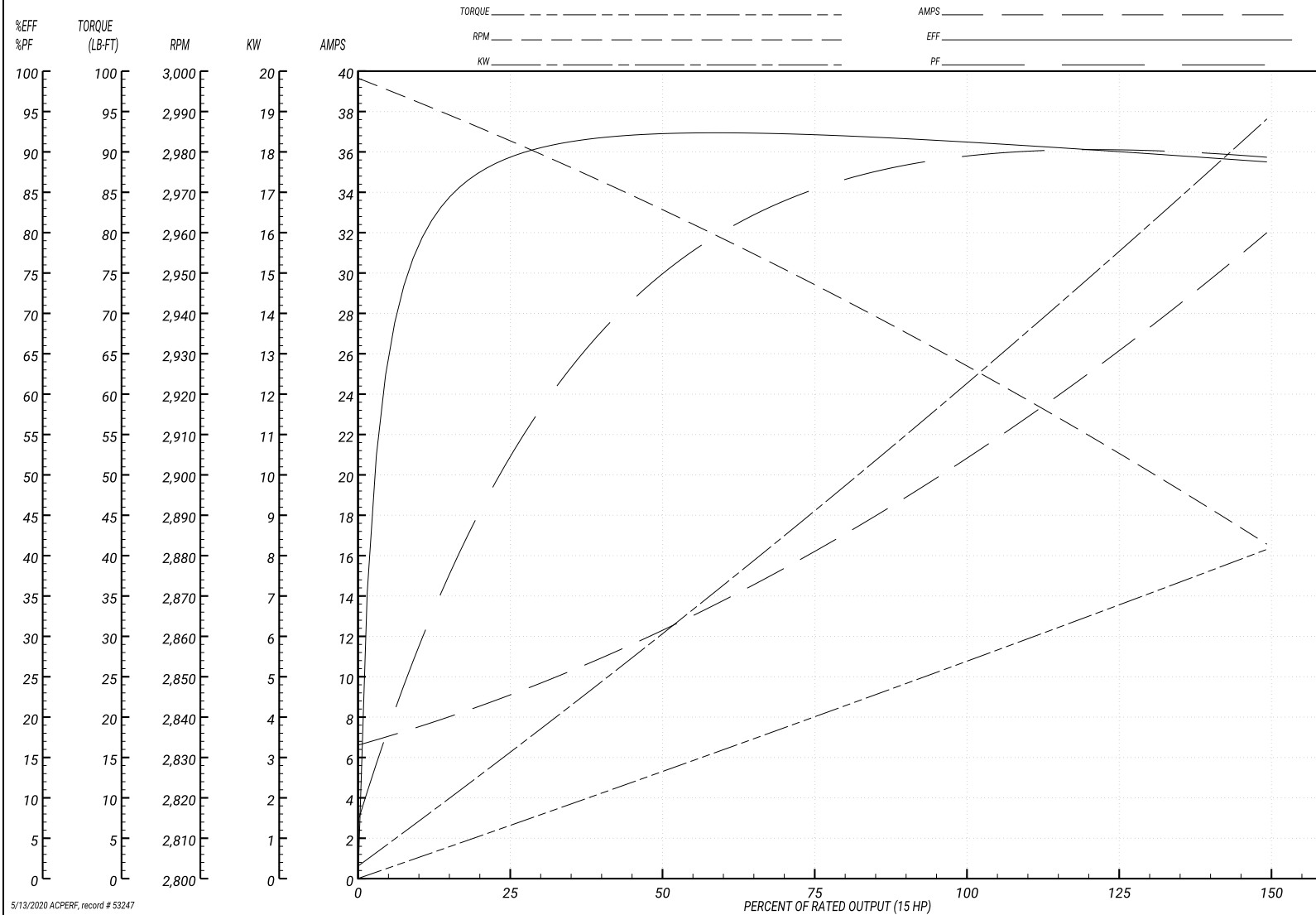
ABB Motors and Mechanical Inc.

WINDING # 09WGZ601

Typical performance - not guaranteed values.

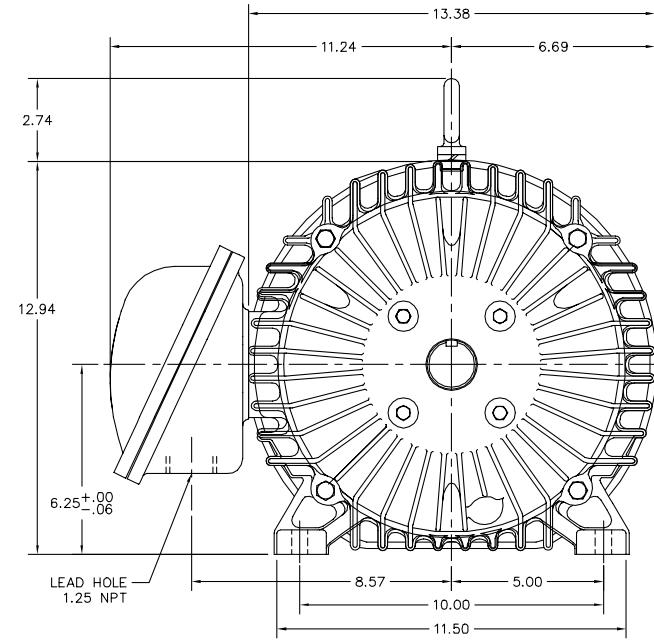
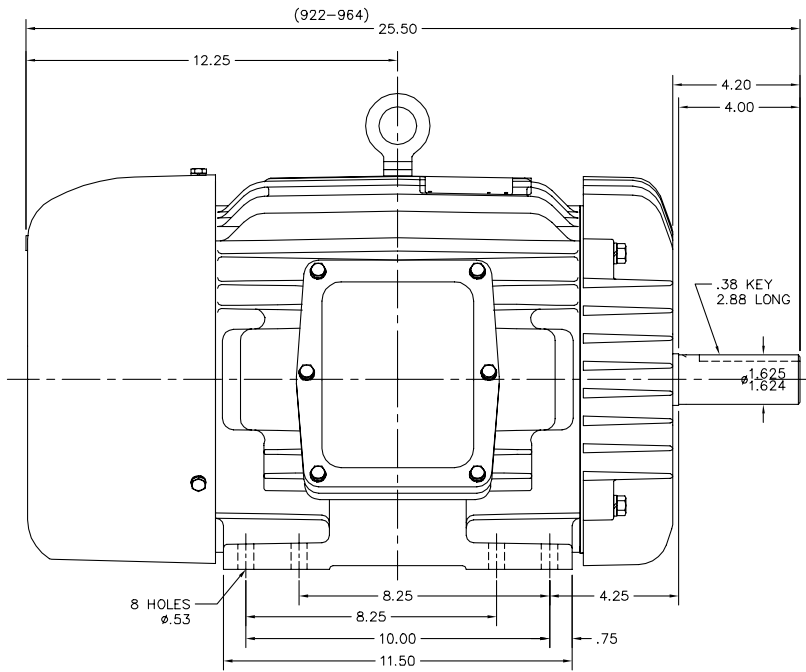
15 HP 3 PH 50 HZ 2928 RPM 380 V 0936M

TORQUES(LB-FT): PO=106 PU=41.4 LR=52.5 LRA=157



5/13/2020 ACPERF, record # 53247

09LYE270



09LYE270

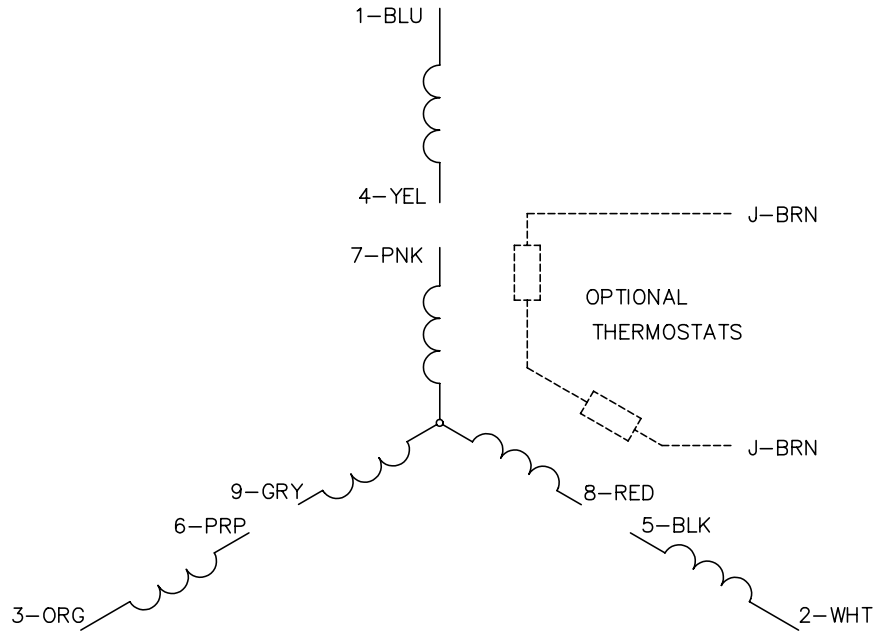
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: UPDATE TO ADD 964 STACK	VERSION: 05	TDR: 000001063842
REV. LTR: H	REVISED: 08:52:15 03/14/2018	BY: USBRKNI1
FILE: \AAA\00000\626		
MTL: -		

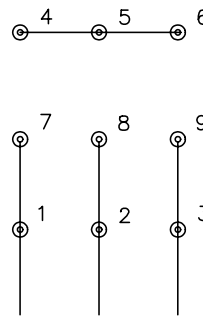
**BALDOR**

HORZ XPFC 254-6T CL.I GP.D,CL.II GP.F&G  
SH 1 of 1

CD0005

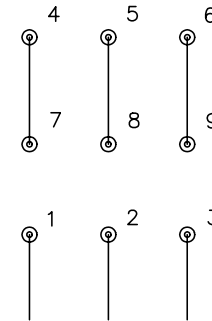


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005