

BALDOR® • RELIANCE 

Product Information Packet

ZDVSCP2334T

20HP, 1770RPM, 3PH, 60HZ, 256TC, 0960M, TEFC, F

Part Detail							
Revision:	E	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	09WGT459	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	09K342	Layout:	09LYK342	Poles:	04	Created Date:	11-27-2017
Base:	RG	Eff. Date:	06-21-2018	Leads:	9#10		

Specs			
Catalog Number:	ZDVSCP2334T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Duty
Frame:	256TC	KVA Code:	J
Frame Material:	Iron	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	20.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 10 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	0960M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	83
	UR	Product Family:	Chemical Processing (Not DC)
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	24.000 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding

	48.000 A @ 230.0 V	Shaft Rotation:	Reversible
	52.000 A @ 208.0 V	Shaft Slinger Indicator:	Shaft Slinger
Design Code:	A	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	TACHOMETER	Thermal Device - Winding:	Normally Closed Thermostat
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
Heater Indicator:	No Heater	Winding Thermal 2:	None

Nameplate NP3303L	
CAT NO	ZDVSCP2334T
SPEC.	09K342T459Z1
FRAME	256TC HP 20 TE
VOLTS	230/460
MAG CUR	20.8/10.4 FLA 48/24
RPM	1770 RPM MAX 2700
HZ	60 PH 3 CLASS F
SER.F.	1.00 SL HZ 1
NEMA-NOM-EFF	93 WK2 2.62
RATING	40C AMB-CONT
DE BRG	6309 ODE BRG 6309
CC	010A SN
	1.5:1 CHP PWM

Nameplate NP0090L	
FRONT	6309
PULLEY	6309
LUBRICATE WITH	
GREASE	POLYREX EM

Parts List		
Part Number	Description	Quantity
SA348221	SA 09K342T459Z1	1.000 EA
RA336773	RA 09K342T459Z1	1.000 EA
09FN3001D01SP	EXTERNAL FAN, PLASTIC	1.000 EA
09CB1002A12P	KOBX W/1.25 NPT LEAD HOLE & 2.38 MTG HOL	1.000 EA
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 EA
10XN2520K12	1/4-20 X.75 GRD 5	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
WD1000B16	T&B CX70TN TERMINAL	1.000 EA
10XN2520K08	1/4-20 X .50 GRADE #5, STL, ZINC PLATE	1.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 EA
HW4600B67	V-RING SLINGER 1.770 X 2.170 X .28 VITON	1.000 EA
HA3400A39	STUD- 3/8-16 X 6.44 OAL HEX	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4017A08	.125X3.50 GREASER EXTEN.	1.000 EA
HA4017A02	.125X2.50 GREASER EXTENS.F/S	1.000 EA
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 EA
09EP1318A02P	ENDPLATE, MACH EPOXY PRIMER	1.000 EA
10XN3816K24	3/8-16 X 1.50 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 EA
611712073A	TACH 210	1.000 EA
10XN2520K12	1/4-20 X.75 GRD 5	1.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 EA
10XN1032K12	10-32 X .75 HD, GRADE 5	2.000 EA
HW1001A10	WASHER, #10 SPLT LK, ZN X	2.000 EA
HW1000A10	#10 FLAT WASHER (SAE)	2.000 EA
09FH1000A38P	FAN COVER, MACH W/EPOXY PRIMER	1.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA
12CB1503P	CONDUIT BOX LID, CAST W/EPOXY PRIMER	1.000 EA
12GS1002	GASKET, CONDUIT BOX LID, NEOP	1.000 EA
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 QT
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.023 EA
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 EA
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
09EP1118A37GP6	FREP MACH, 309 BRG. EPOXY PRIMER	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4500A05	1669B ALEM/UNIV860 GR FTG X	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA

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HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.080 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1025N19	WILKOFASST, 778.50, RELIANCE BLUE-GREEN	0.050 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP3303L	SS VEC UL CSA CC (W/OUT DESIGN FIELD)	1.000 EA
NP0090L	NP BRG INFO LASER ETCHED	1.000 EA
40PA1005	PACKAGING GROUP, 09 STD	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	48/24	Base Volt	460	R1	0.167	X1	0.876
HP	20 HP	NL AMPS	10.40	R2	0.159	X2	1.160
BASE SPEED	1772	Slips(Hz)	0.94			XM	30.000
PHASE/Hz	3/60	Wk2 ()	0.000				

Rated Full Load Data



	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1771.9	20.0	59.3	460	60	24.0
Max Speed	2657	20.0	39.5	460	90	23.1
Min Speed	0	0.0	59.3	17.91	0.94	24.0

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1798.9	0.0	0.0	460	60	10.4
1/4	1793.2	5.0	14.7	460	60	11.8
1/2	1786.4	10.0	29.4	460	60	15.0
3/4	1779.1	15.0	44.3	460	60	19.2
Full Load	1771.9	20.0	59.3	460	60	24.0
O/L	1741	40.1	121.0	460	60	48.7

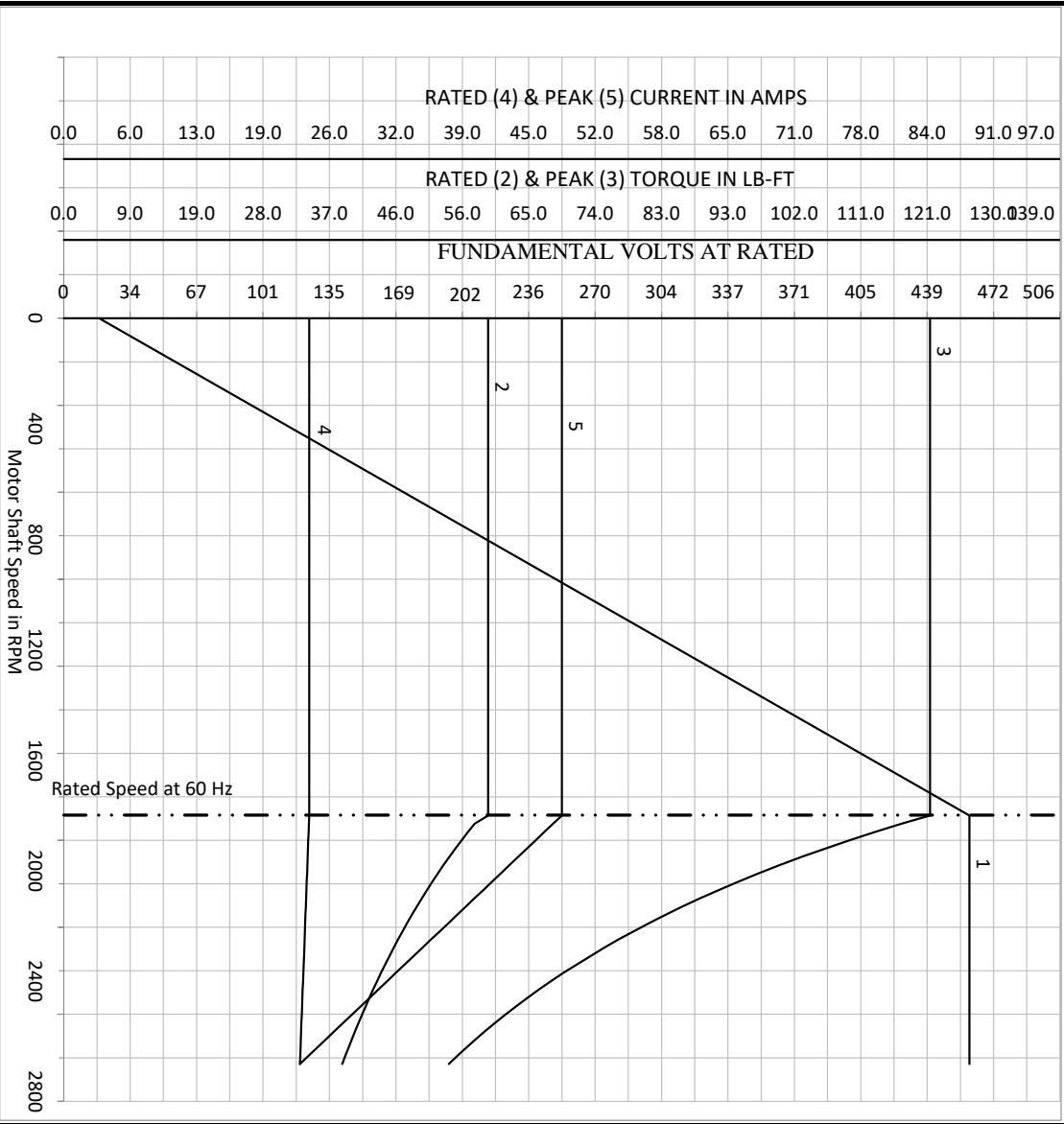
Blower Data	Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data
Vector PWM Inverter Duty

	DR BY	USBRRANI	A-C MOTOR	09WGT459
	CK BY	USBRRANI	PERFORMANCE	
	APP BY	USBRRANI	CURVES	
	DATE	11/27/2017		Record: 67965

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	48/24	Base Volt	460	R1	0.167	X1	0.876
HP	20 HP	NL AMPS	10.40	R2	0.159	X2	1.160
BASE SPEED	1771.90002	Slips(Hz)	0.94	XM			30.000
PHASE/HZ	3/60	WK2 ()	0.000				

Variable Speed AC Motor Curves
Vector PWM Inverter Duty



Calculated Data
Data Valid For Nameplate Speed Range only



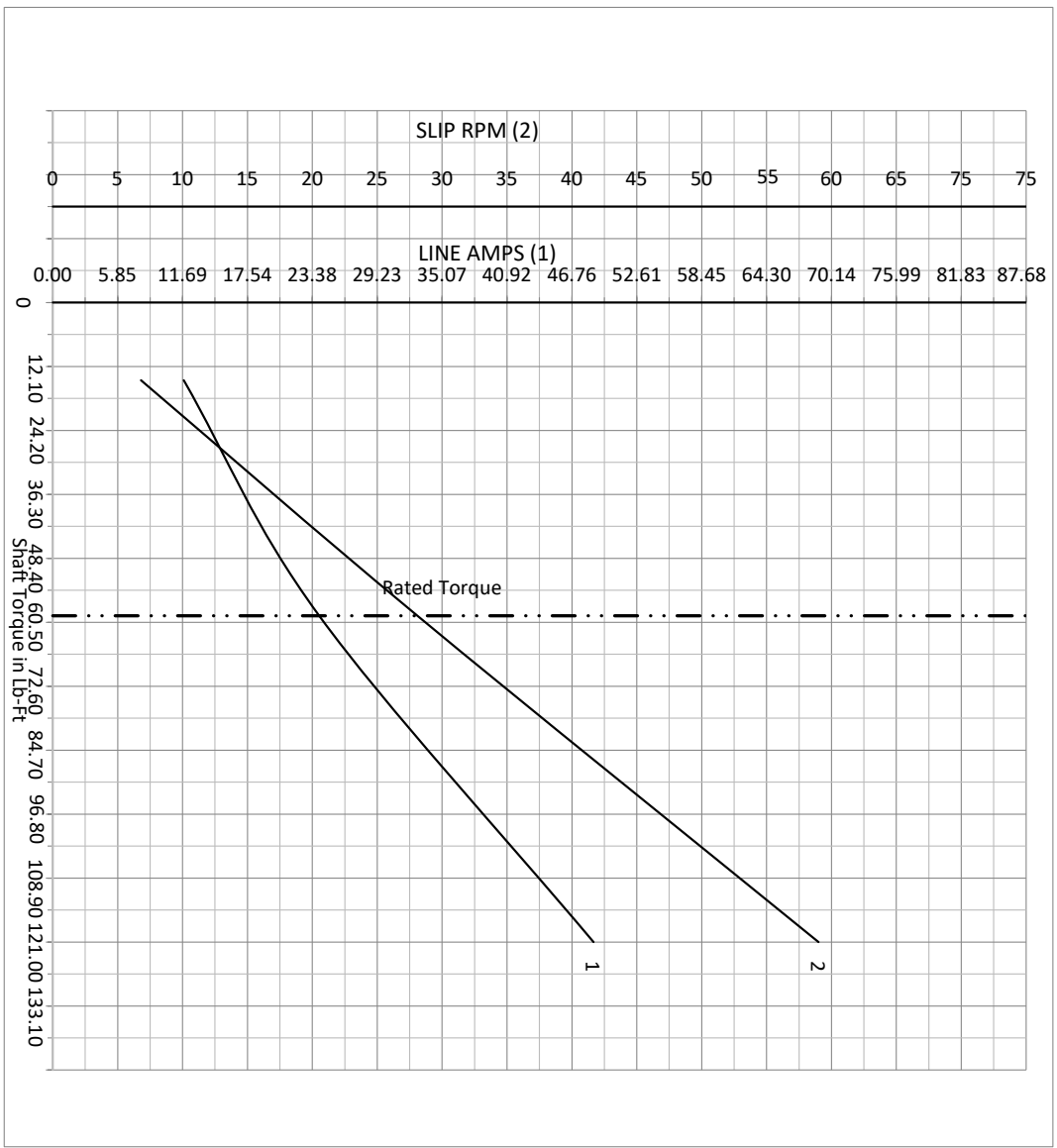
DR BY USBRRANI
CK BY
APP BY USBRRANI
DATE 11/27/2017

A-C MOTOR
PERFORMANCE
CURVES

09WGT459
Record: 67965

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	48/24	Base Volt	460	R1	0.167	X1	0.876
HP	20 HP	NL AMPS	10.40	R2	0.159	X2	1.160
BASE SPEED	1771.900024	Slips(HZ)	0.94	XM			30.000
PHASE/HZ	3/60	WK2 ()	0.000				

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



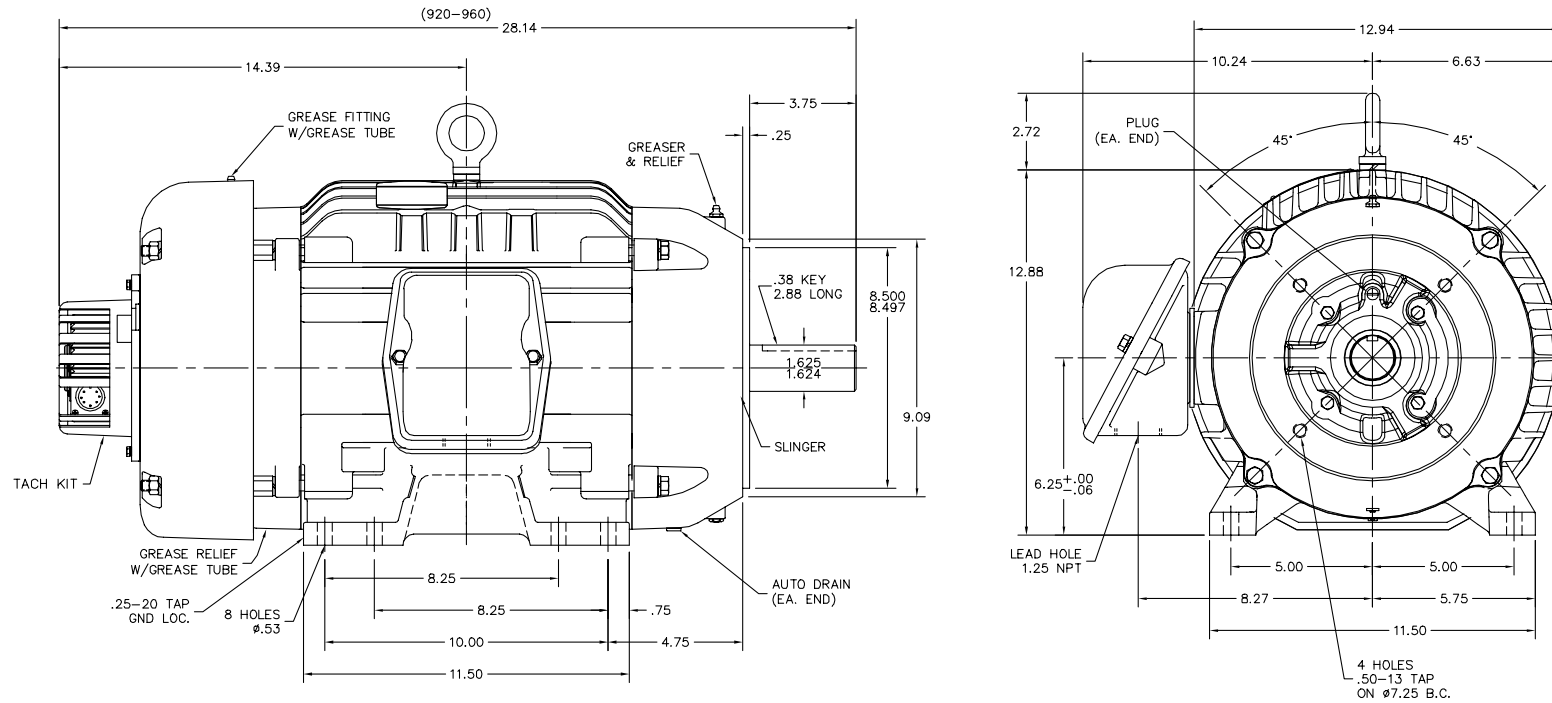
Calculated Data

Data Valid For Nameplate Speed Range only

BALDOR
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DR BY	USBRRANI	A-C MOTOR	09WGT459
CK BY		PERFORMANCE	
APP BY	USBRRANI	CURVES	
DATE	11/27/2017		Record: 67965

09LYK342



09LYK342

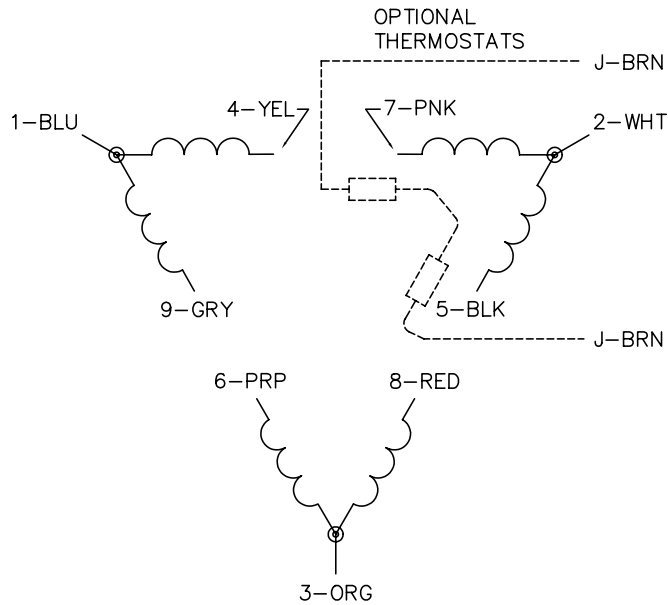
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: ADDED GND HOLE TAP SIZE	VERSION: 03	TDR: 00000954909
REV. LTR: C	REvised: 01:00:35 12/07/2015	BY: ENNINDO
FILE: \AAA\00193\200		
MTL: -		

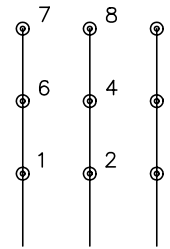
BALDOR

HORZ TEFC 254-6TC CP W/309 BRGS, PLS, THRU SH ENC & COVER
SH 1 of 1

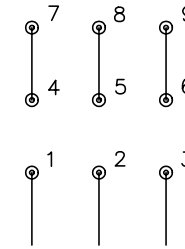
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



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: C	BY: JLP	REVISED: 01/21/99 2:28	TDR: 0171435
0810D0		FILE: AAA00005148	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180

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