

BALDOR® • RELIANCE 

Product Information Packet

ZDVSCP4104T

30HP, 1760RPM, 3PH, 60HZ, 286TC, 1056M, TEFC, F

Part Detail							
Revision:	B	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	10WGY538	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	10H956	Layout:	10LYH956	Poles:	04	Created Date:	08-24-2017
Base:	RG	Eff. Date:	05-09-2018	Leads:	9#8		

Specs			
Catalog Number:	ZDVSCP4104T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Duty
Frame:	286TC	KVA Code:	J
Frame Material:	Iron	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	30.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 8 AWG
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	1056M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	80
	CSA	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:	38.000 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding

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

Nameplate NP3303L	
CAT NO	ZDVSCP4104T
SPEC.	10H956Y538Z1
FRAME	286TC HP 30 TE
VOLTS	230/460
MAG CUR	36/18 FLA 76/38
RPM	1760 RPM MAX 2700
HZ	60 PH 3 CLASS F
SER.F.	1.00 SL HZ 1.33
NEMA-NOM-EFF	93.6 WK2 4.46
RATING	40C AMB-CONT
DE BRG	6311 ODE BRG 6311
CC	010A SN 1.5:1 CHP PWM

Nameplate NP0090L	
FRONT	6311
PULLEY	6311
LUBRICATE WITH	
GREASE	POLYREX EM

Parts List		
Part Number	Description	Quantity
SA343823	SA 10H956Y538Z1	1.000 EA
RA332293	RA 10H956Y538Z1	1.000 EA
10CB1000A09P	CONDUIT BOX, MACH W/EPOXY PRIMER	1.000 EA
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	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
WD1000B16	T&B CX70TN TERMINAL	1.000 EA
10XN2520K06	1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P	1.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 EA
HA4017A03	.125 X 1.75 GREASE EXT (F/S)	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
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HW4600B67	V-RING SLINGER 1.770 X 2.170 X .28 VITON	1.000 EA
HW5100A13	W4627-047 WVY WSHER	1.000 EA
10XN3118K36	5/16-18 X 2.25" HEX HD, GRADE 5	2.000 EA
10EP1305A117P	PU ENDPLATE, MACH W/EPOXY	1.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
10FH1007A59P	FAN COVER, MACH FOR DBL SHF MTRS	1.000 EA
10XN3118K24	5/16-18 X 1.50" HEX HD, GRADE 5	3.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 EA
611712073A	TACH 210	1.000 EA
10XN2520K12	1/4-20 X.75 GRD 5	2.000 EA
HW1000A25	1/4 SAE FLAT WASHER (FS)	2.000 EA
10CB1503A01P	CONDUIT BOX LIPPED LID, MACH W/EPXY PRMR	1.000 EA
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 EA
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 QT
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.033 EA
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 EA
10EP1110A44GP6	FREP, MACH W/PRIMER & GREEN PAINT	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.130 LB
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA

Product Information Packet: ZDVSCP4104T - 30HP,1760RPM,3PH,60HZ,286TC,1056M,TEFC,F

09FN3001C02	EXTERNAL FAN, PLASTIC	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN	0.070 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
10PA1010	PACKAGING GROUP, PRINT PK1151A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	76/38	Base Volt	460	R1	0.107	X1	0.492
HP	30 HP	NL AMPS	17.90	R2	0.515	X2	0.443
BASE SPEED	1777	Slips(Hz)	0.78	R2B	0.075	X2B	0.692
PHASE/HZ	3/60	WK2 (LB-FT2)	4.470	R2E	0.022	XM	12.800

Rated Full Load Data



	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1776.5	30.0	88.7	460	60	37.6
Max Speed	2664	30.0	59.1	460	90	33.4
Min Speed	0	0.0	88.7	16.78	0.78	37.6

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1798.9	0.0	0.0	460	60	17.9
1/4	1792.2	7.5	22.1	460	60	19.8
1/2	1787.6	15.0	44.1	460	60	24.3
3/4	1782.4	22.5	66.2	460	60	30.7
Full Load	1776.5	30.0	88.7	460	60	37.6
O/L	1749	60.0	180.0	460	60	73.0

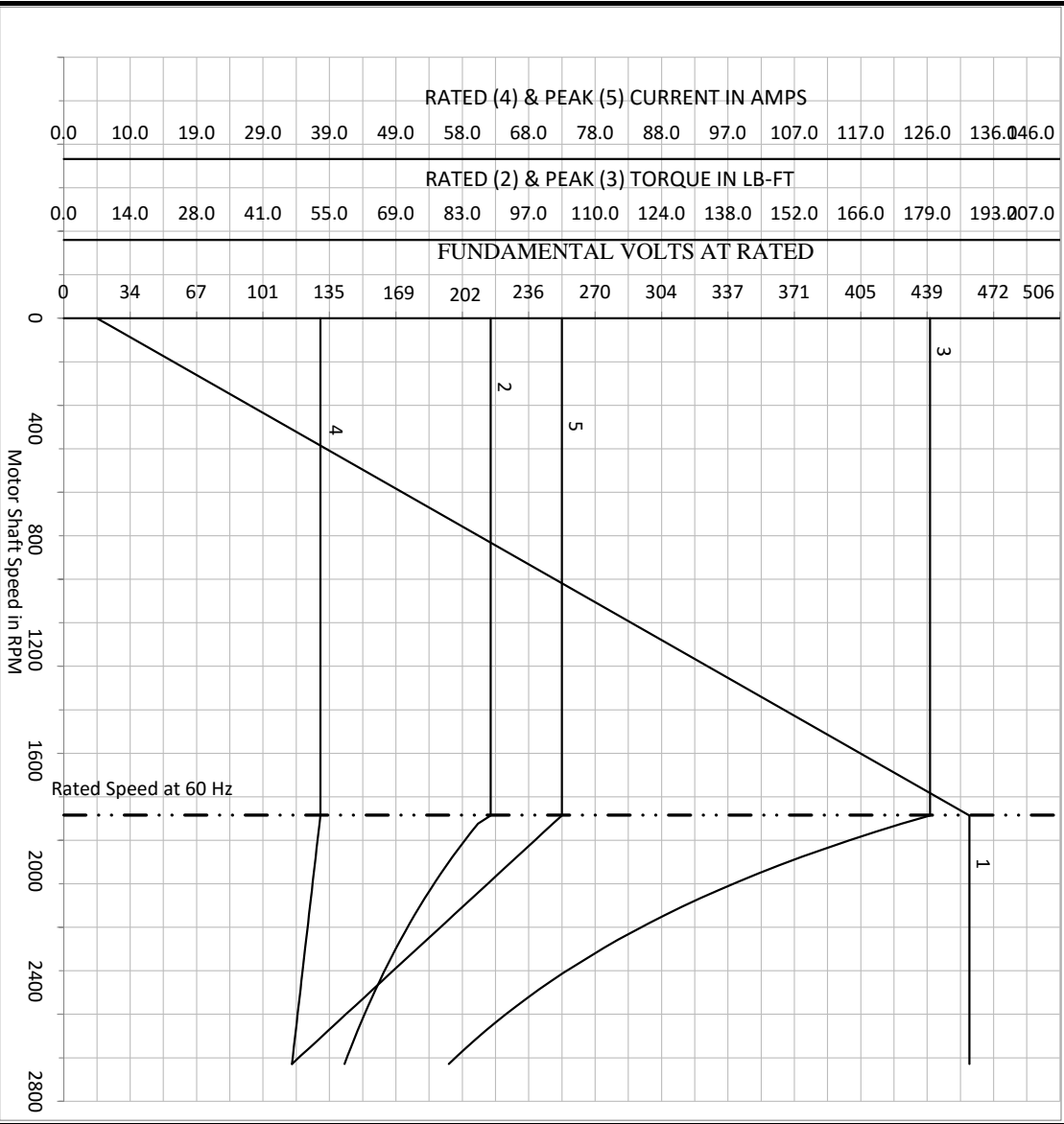
Blower Data	Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data
Vector PWM Inverter Duty

	DR BY	USBRRANI	A-C MOTOR PERFORMANCE CURVES	10W/GY538
	CK BY	USBRRANI		
	APP BY	USBRRANI	Record: 52925	
A MEMBER OF THE ABB GROUP	DATE	8/24/2017		

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	76/38	Base Volt	460	R1	0.107	X1	0.492
HP	30 HP	NL AMPS	17.90	R2	0.515	X2	0.443
BASE SPEED	1776.5	Slips(HZ)	0.78	R2B	0.075	X2B	0.692
PHASE/HZ	3/60	WK2 (LB-FT2)	4.470	R2E	0.022	XM	12.800

Variable Speed AC Motor Curves
Vector PWM Inverter Duty



Calculated Data
Data Valid For Nameplate Speed Range only

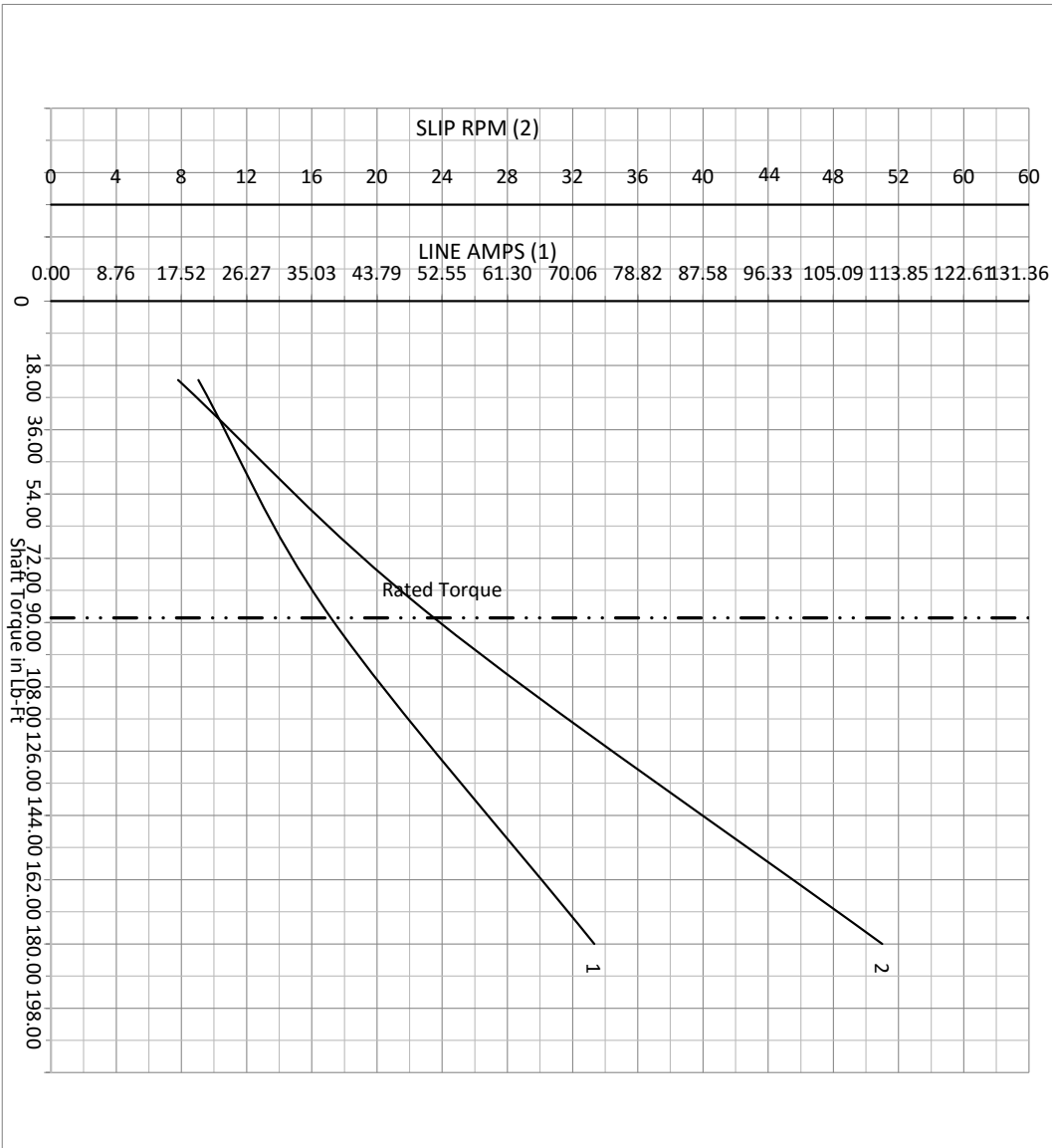
BALDOR
A MEMBER OF THE ABB GROUP

DR BY USBRRANI
CK BY
APP BY USBRRANI
DATE 8/24/2017

A-C MOTOR PERFORMANCE CURVES
10WGY538
Record: 52925

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	76/38	Base Volt	460	R1	0.107	X1	0.492
HP	30 HP	NL AMPS	17.90	R2	0.515	X2	0.443
BASE SPEED	1776.5	Slips(HZ)	0.78	R2B	0.075	X2B	0.692
PHASE/HZ	3/60	WK2 (LB-FT ²)	4.470	R2E	0.022	XM	12.800

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

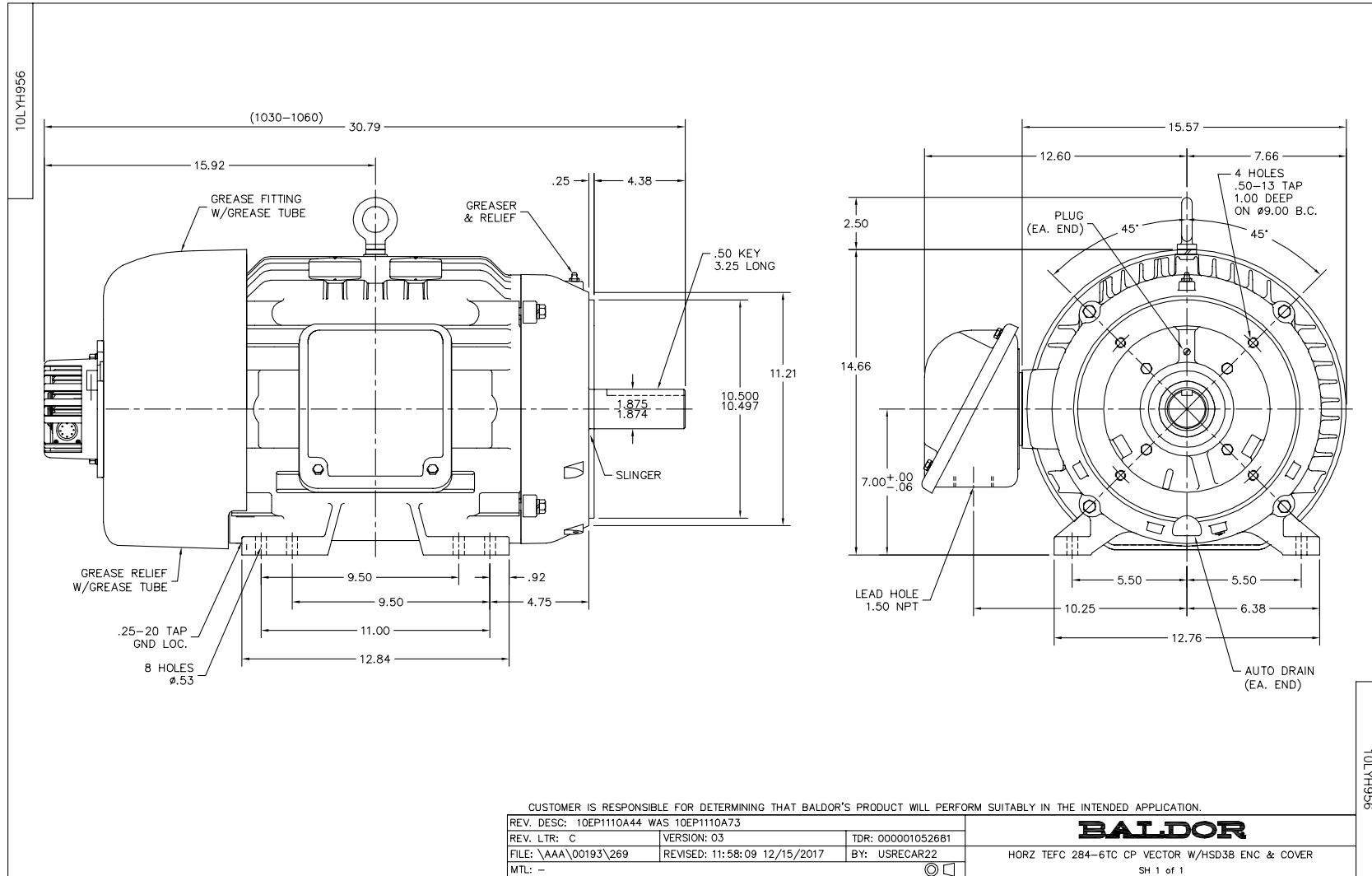
Data Valid For Nameplate Speed Range only

BALDOR
A MEMBER OF THE ABB GROUP

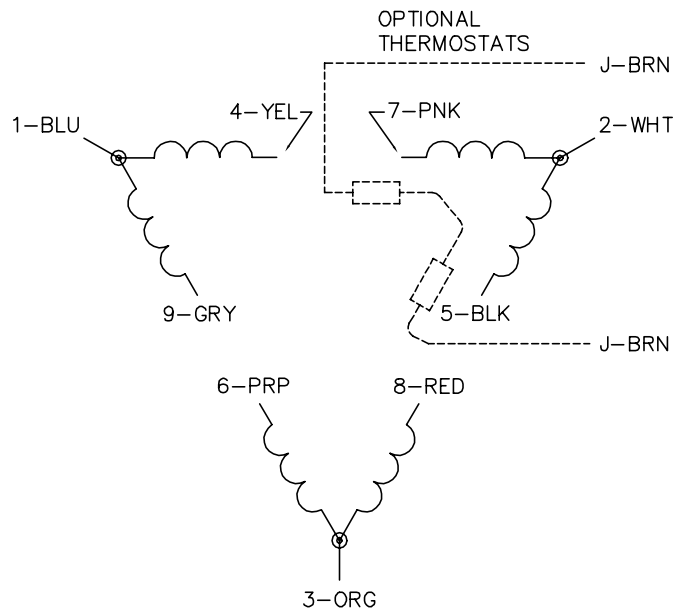
DR BY USBRRANI
CK BY
APP BY USBRRANI
DATE 8/24/2017

A-C MOTOR PERFORMANCE CURVES

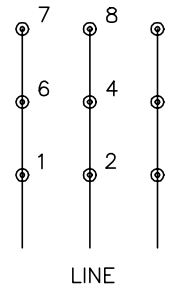
10WGYS38
Record: 52925



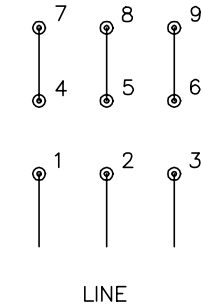
CD0180



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.

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: ENBRIRO
MTL: -	© □	

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>