

ABB BALDOR RELIANCE III

Customer information packet

ZDVSM4314T

60HP, 1800RPM, 3PH, 60HZ, 364T, TEFC, FOOT,

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	364T
Frame Material	Iron
Frequency	60.00 Hz 90.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	60.000 HP @ 60 HZ 60.000 HP @ 90 HZ
Phase	3
Synchronous Speed @ Frequency	3000 RPM @ 90 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 460.0 V @ 90 HZ 230.0 V @ 90 HZ 230.0 V @ 60 HZ
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	1000:1
Current @ Voltage	71.200 A @ 460.0 V 69.100 A @ 460.0 V 142.000 A @ 230.0 V 138.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Feedback Device	TACHOMETER
Heater Indicator	No Heater
High Voltage Full Load Amps	69.1 a

Part Detail

Revision	N
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4074
Layout	611740-200
Eff. date	07-23-2025
CD Diagram	416820-002
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	10-19-2010

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	No Lifting Lugs
Max Speed	3600 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A36062M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	36.75 IN
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1785 rpm 2675 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613007HV										
CAT NO	ZDVSM4314T			SPEC NO.	P36G3219					
SER.NO.				FRAME	364T					
	HP	RPM	VOLTS	AMPS		HZ	TYPE	P		
BASE	60	1785	230/460	142/71		60	SF	1.00		
MAX	60	2675	230/460	138/68		90	INSUL.CLASS		F	
DRIVE END BEARING	65BC03J30X		CONSTANT TORQUE			DUTY	CONT		AMB	40
OPP D.E. BEARING	65BC03J30X		1000:1		ENCL	TEFC	PHASE	3		
DESIGN NO.	A36WG4074-R002		FLUX AMPS		54/27		VPWM INVERTER READY			
MAX SPEED/RPM	3600		OVERTEMP PROT		2	WK2	14.32		POLES	4 WEIGHT

ABB BALDOR/460		CUSTOMER INFORMATION PACKET		ZD/SM4314T - 60HP, 1800RPM, 3PH, 60HZ, 364T, TEFC, FOOT,		WYE CONNECT OHMS PER PHASE (BASE RATING, 20C)	
NP AMPS	142/71//136/68	Base Volt	460	R1	0.052	X1	0.286
HP	60	NL AMPS	27.38	R2	0.306	X2	0.113
BASE SPEED	1784	Slip (HZ)	0.53	R2B	0.023	X2B	0.418
PHASE/HZ	3/60	WK ² (lb-ft ²)	14.300	R2E	0.007	XM	8.590

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1784	59.8	176.0	460	60	70.1
Max Speed	2675	60.1	118.0	460	90	66.8
CT Min Speed	1.784	0.060	176.0	0.46	0.06	70.1

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	460	60	27.4
1/4	1796	15.0	43.7	460	60	32.0
1/2	1792	29.9	87.7	460	60	42.2
3/4	1788	45.0	132.0	460	60	55.4
Full Load	1784	59.8	176.0	460	60	70.1
O/L	1766	119.8	356.0	460	60	142.0

Remarks: Calculated Data

BALDOR • RELIANCE

DR BY USBRRANI
CK BY CD
APP BY USBRRANI
DATE 8/17/2026

**A-C MOTOR
PERFORMANCE
CURVES**

A36WG4074

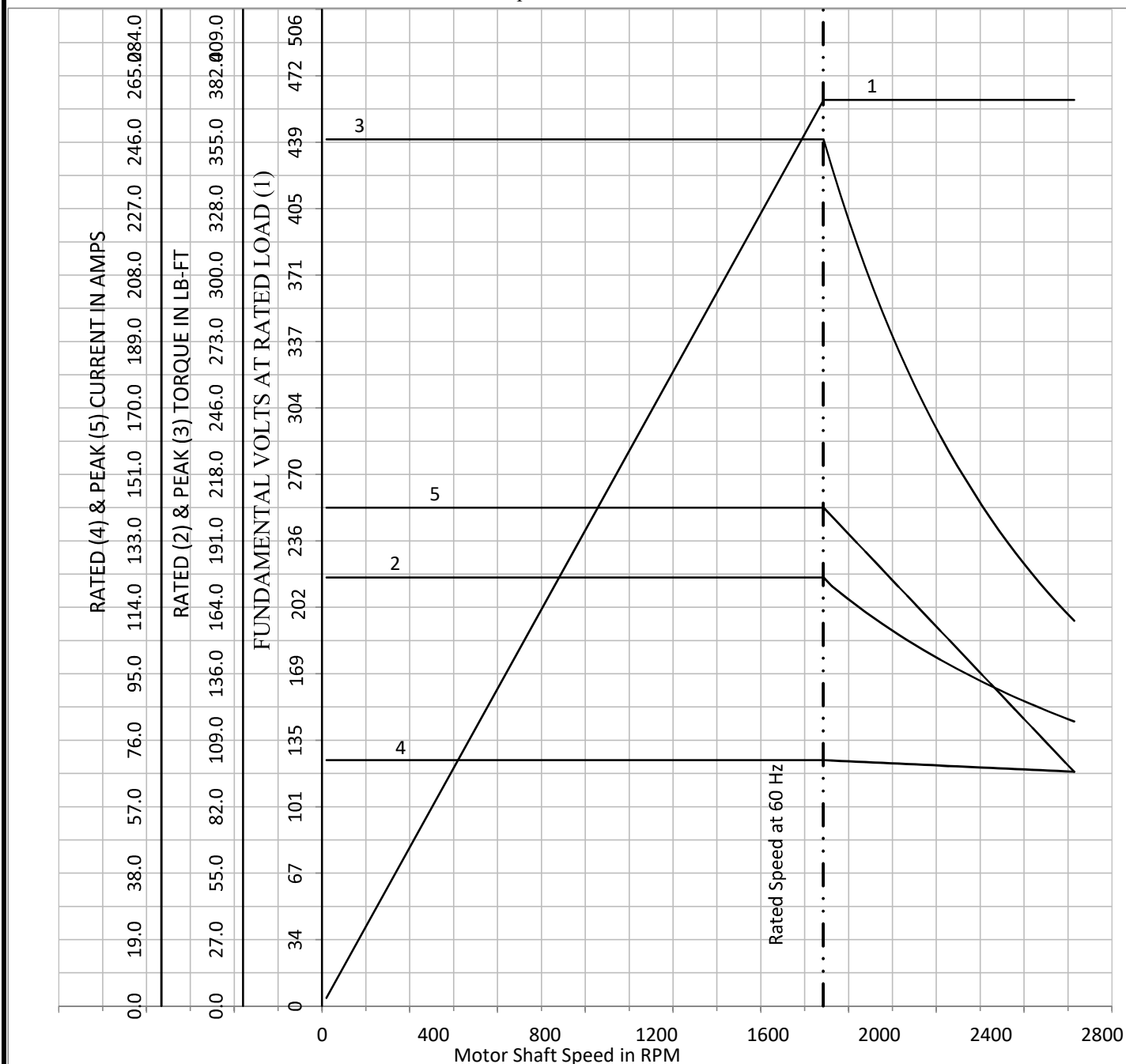
Record: 77714

ZD/SM4314T - 60HP, 1800RPM,
 Base Volt 460
 NL AMPS 27.38
 Slip (HZ) 0.53
 WK² (lb-ft²) 14.300

WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)
 PH, 60HZ, 364T, TEFC, FOOT
 R1 0.052 X1 0.286
 R2 0.306 X2 0.113
 R2B 0.023 X2B 0.418
 R2E 0.007 XM 8.590

HP 60
 BASE SPEED 1784
 PHASE/HZ 3/60

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

BALDOR • RELIANCE

DR BY USBRRAN1
 CK BY CD
 APP BY USBRRAN1
 DATE 8/17/2026

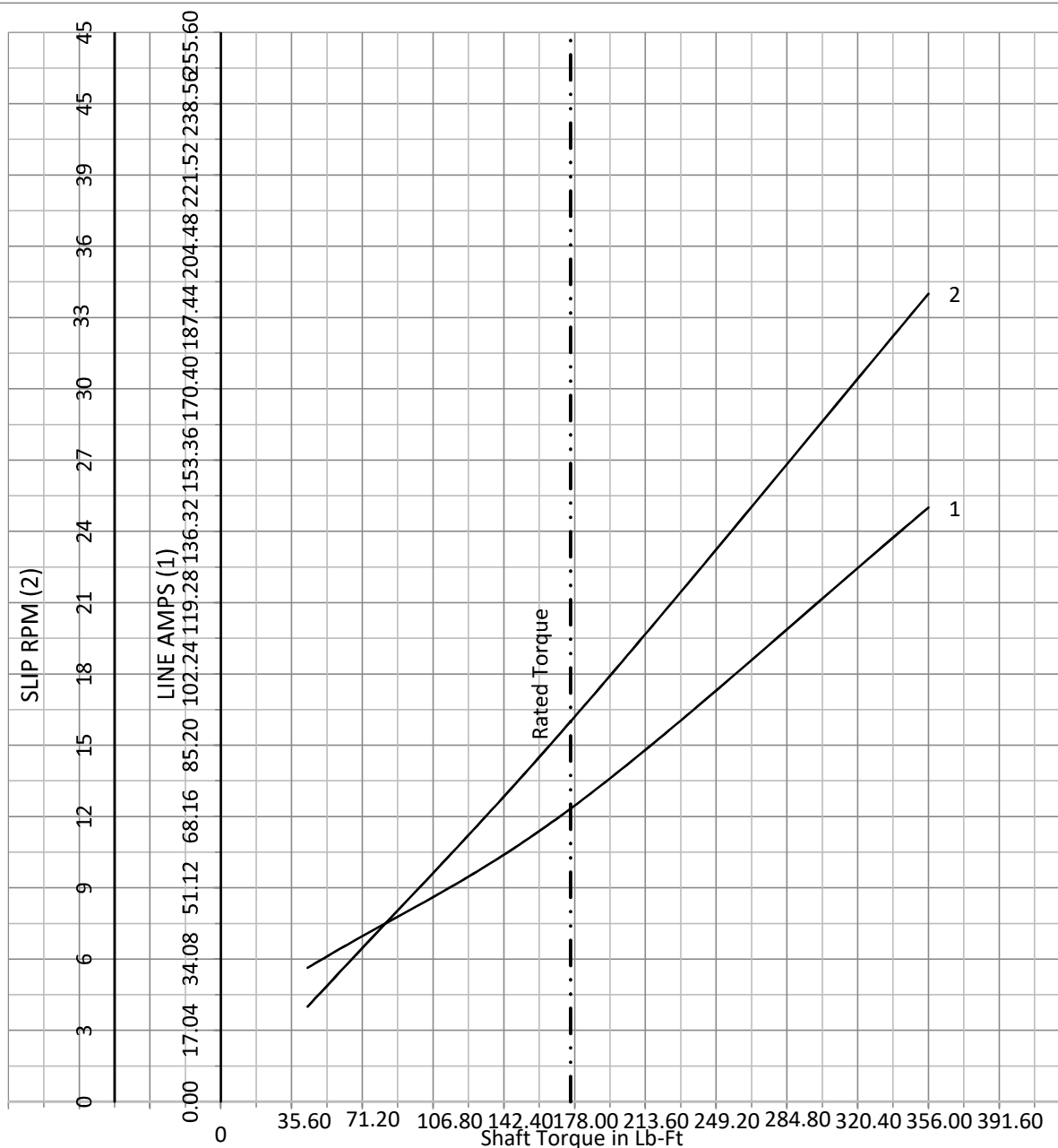
**A-C MOTOR
 PERFORMANCE
 CURVES**

A36WG4074

Record: 77714

BALDOR RELIANCE		CUSTOMER INFORMATION PACKET		ZD/SM4314T - 60HP, 1800RPM, 3PH, 60HZ, 364T, TEFC, FOOT		WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)	
HP	60	Base Volt	460	R1	0.052	X1	0.286
BASE SPEED	1784	NL AMPS	27.38	R2	0.306	X2	0.113
PHASE/HZ	3/60	Slip (HZ)	0.53	R2B	0.023	X2B	0.418
		WK2 (lb-ft2)	14.300	R2E	0.007	XM	8.590

Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

BALDOR • RELIANCE

DR BY USBRRANI
CK BY CD
APP BY USBRRANI
DATE 8/17/2026

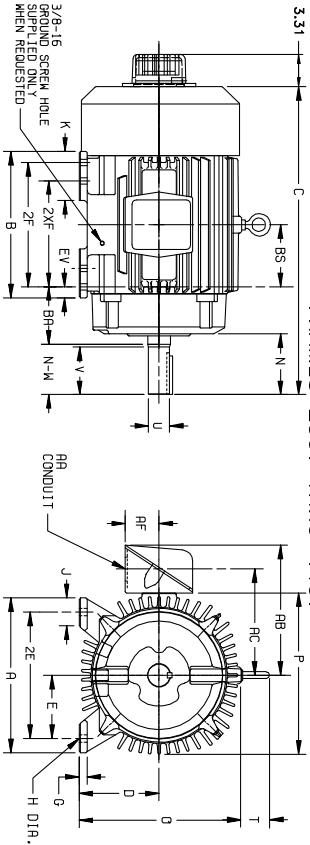
**A-C MOTOR
PERFORMANCE
CURVES**

A36WG4074

Record: 77714

DUTY MASTER ALTERNATING CURRENT MOTORS

ENCLOSURE: TOTALLY ENCLOSED SQUIREL-CAGE INDUCTION COOLING: FAN COOLED
MOUNTING: FOOT
ACCESSORIES: BEI HS 35 TACH FRAMES 250T THRU 440T



DIMENSIONS ARE IN INCHES

FRAME	A	D(2)	E	G	H	J	K	O	P	T	AA	AB	AC	AF	BA	EV
254T-256T	12.50	6.25	5.00	.75	.56	2.50	---	13.25	13.58	2.44	1-1/4	10.75	8.75	2.50	4.25	1.00
284T-286T	13.75	7.00	5.50	.75	.56	2.50	---	14.75	14.88	2.44	1-1/2	12.75	10.00	3.19	4.75	1.00
324T-326T	15.50	8.00	6.25	.88	.69	2.75	4.50	16.69	17.00	2.44	2	15.19	11.44	4.25	5.25	1.38
364T-366T	17.00	9.00	7.00	.88	.69	2.75	3.88	18.50	19.50	2.94	3	18.06	14.00	5.38	5.88	1.38
404T-406T	19.00	10.00	8.00	1.12	.81	3.25	4.62	21.31	22.50	2.94	3	19.31	15.25	5.38	6.62	1.13
444T-446T	21.00	11.00	9.00	1.12	.81	3.25	5.25	23.38	25.25	3.25	3	23.38	18.12	6.50	7.50	1.25

FRAME	SIZE	C	BS	B	2F	(4)	N	N-W(6)	U(3)	V	SO	LGTH.	WEIGHT
254T	24.56	5.00	12.00	---	---	8.25	4.12	4.00	1.625	3.75	.375	2.86	305
256T	24.56	5.00	12.00	10.00	---	---	4.12	4.00	1.625	3.75	.375	2.86	315
284T	27.44	5.50	13.00	---	---	9.50	4.62	4.38	1.875	4.38	.500	3.25	435
286T	27.44	5.50	13.00	---	---	---	3.62	3.25	1.625	3.00	.375	1.88	435
288T	27.44	5.50	13.00	11.00	---	---	5.00	4.62	1.875	4.38	.500	3.25	450
286T	26.06	5.50	13.00	11.00	---	---	3.62	3.25	1.625	3.00	.375	1.88	450
324T	30.44	6.00	14.75	---	---	10.50	5.62	5.25	2.125	5.00	.500	3.86	540
324T	28.94	6.00	14.75	---	---	10.50	4.12	3.75	1.875	3.50	.500	2.00	540
326T	30.44	6.00	14.75	12.00	---	---	5.62	5.25	2.125	5.00	.500	3.86	580
326T	28.94	6.00	14.75	12.00	---	---	4.12	3.75	1.875	3.50	.500	2.00	580
364T	33.44	6.12	15.00	---	---	11.25	6.25	5.88	2.375	5.62	.625	4.25	800
364T	31.31	6.12	15.00	---	---	11.25	4.12	3.75	1.875	3.50	.500	2.00	794
365T	33.44	6.12	15.00	12.25	---	---	6.25	5.88	2.375	5.62	.625	4.25	840
365T	31.31	6.12	15.00	12.25	---	---	4.12	3.75	1.875	3.50	.500	2.00	834
404T	38.31	6.88	16.00	---	---	12.25	7.50	7.25	2.875	7.00	.750	5.62	1120
404T	35.31	6.88	16.00	---	---	12.25	4.50	4.25	2.125	4.00	.500	2.75	1111
405T	35.31	6.88	16.00	13.75	---	---	7.50	7.25	2.875	7.00	.750	5.62	1160
405T	33.31	6.88	16.00	13.75	---	---	4.50	4.25	2.125	4.00	.500	2.75	1151
444T	44.62	8.25	19.00	---	---	14.50	8.94	8.50	3.375	8.25	.875	6.86	1540
444T	42.62	8.25	19.00	---	---	14.50	5.94	5.50	3.375	8.25	.875	6.86	1540
445T	44.62	8.25	19.00	16.50	---	---	8.50	8.25	3.375	8.25	.875	6.86	1726
445T	40.88	8.25	19.00	16.50	---	---	5.19	4.75	2.375	4.50	.625	3.00	1714

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "D" VARIES $\frac{1}{2}$ 250T - 320T +.00, -.03.
360T - 440T +.00, -.06.
HP TO 1.625 DIA. +.0000, -.0005
- (3) "U" VARIES $\frac{1}{2}$ 1.625 AND LARGER +.000, -.001.
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
- (6) "N-W" VARIES +.00, -.25.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2-W-1, W-4-W-5-W-7, OR C-1 MOUNTING IS SPECIFIED.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF SHAFT EXTENSION IS .002 T.I.R. TO AND INCLUDING 1.625 DIA. AND .003 T.I.R. 1.625 DIA. TO 5 INCH DIA.

FRAME- _____ TYPE- _____ CERTIFIED FOR- _____
ORDER- _____ ITEM- _____ HP- _____ RPM- _____ PH- _____ HZ _____ VOLTS _____
SALES ORDER- _____ APPROVED BY- _____ DATE _____

C/R 380258

10-541-05 10-541-00

002-074119

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

REV. DESC: REMOVING TITLEBLOCK		
REV. LTR: A	VERSION: 01	TDR: 000000446964
FILE: \RAG\00004\234	REVISED: 15: 33: 32 10/23/2007	BY: CONBPM
MTL: -		

Baldor • Dodge • Reliance

250T-440T TEFC W/ BEI HS35 TACH

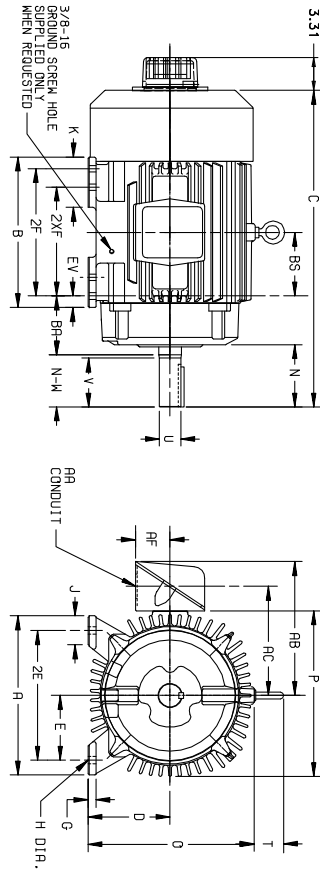
611740-200

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION
ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT

COOLING: FAN COOLED

FRAMES 250T THRU 440T



DIMENSIONS ARE IN MILLIMETERS

FRAME	A	D(2)	E	G	H	J	K	O	P	T	STEEL TERMINAL BOX					
											AA	AB	AC	AF	BA	EV
2541-2561	317.50	156.75	127.00	19.05	4.22	6.35	—	—	3.66	55.24	38.10	107.95	25.40	25.40	63.50	
2584-2587	317.50	177.80	139.10	19.05	4.22	6.35	—	—	3.66	57.99	2.44	110.65	25.40	25.40	63.50	
2814-2861	333.70	160.25	120.18	22.33	5.37	5.18	19.57	4.31	42.33	99.13	4.80	120.65	35.75	35.75	63.50	
3364-3365	333.70	182.60	127.80	22.33	5.37	5.18	19.57	4.31	42.33	99.13	4.80	120.65	35.75	35.75	63.50	
3641-3651	333.70	182.60	127.80	22.33	5.37	5.18	19.57	4.31	42.33	99.13	4.80	120.65	35.75	35.75	63.50	
4041-4051	482.60	164.50	100.20	20.28	4.50	5.75	17.51	5.41	51.27	50.65	2.94	76.2	49.0	47.38	135.61	
4441-4451	533.40	179.40	122.60	22.33	5.37	5.18	19.57	4.31	42.33	99.13	4.80	120.65	35.75	35.75	63.50	

(1)	FRAME SIZE	(4)				SHA-1 AND KEY		SHA-2		MOS (5)			
		C	BS	B	ZF	2XK	N	N-W(6)	U(7)		V(8)	SO.	LGTH.
2561	687.32	127.00	304.80	254.00	---	209.55	104.65	101.60	41.275	95.25	9.525	73.15	1.39
2562	687.32	127.00	304.80	254.00	---	209.55	104.65	101.60	41.275	95.25	9.525	73.15	1.39
2641	778.12	159.70	330.20	---	---	241.50	127.00	117.35	41.625	111.20	12.700	82.55	1.98
2643	770.07	159.70	330.20	---	---	241.50	127.00	117.35	41.625	111.20	12.700	82.55	1.98
2681	703.07	138.70	330.20	279.40	---	216.00	127.00	117.35	41.275	76.20	9.525	73.15	1.39
2683	703.07	138.70	330.20	279.40	---	216.00	127.00	117.35	41.275	76.20	9.525	73.15	1.39
3241	847.85	152.40	374.65	---	---	266.70	142.75	133.55	41.935	127.00	12.700	98.55	2.45
3243	809.75	152.40	374.65	---	---	266.70	142.75	133.55	41.935	127.00	12.700	98.55	2.45
3261	847.85	152.40	374.65	304.80	---	142.75	133.55	133.55	41.935	127.00	12.700	98.55	2.45
3263	809.75	152.40	374.65	304.80	---	142.75	133.55	133.55	41.935	127.00	12.700	98.55	2.45
3641	936.75	155.45	381.00	---	---	285.75	158.25	149.25	43.625	148.50	15.075	100.50	2.64
3643	936.75	155.45	381.00	---	---	285.75	158.25	149.25	43.625	148.50	15.075	100.50	2.64
3661	936.75	155.45	381.00	311.15	---	285.75	158.25	149.25	43.625	148.50	15.075	100.50	2.64
3663	936.75	155.45	381.00	311.15	---	285.75	158.25	149.25	43.625	148.50	15.075	100.50	2.64
3681	882.65	155.45	381.00	---	---	104.65	95.25	86.325	14.770	10.000	50.60	3.79	9.00
3683	882.65	155.45	381.00	311.15	---	104.65	95.25	86.325	14.770	10.000	50.60	3.79	9.00
4041	957.07	174.75	406.40	---	---	311.5	190.50	184.15	73.025	177.80	19.500	142.75	5.09
4043	957.07	174.75	406.40	---	---	311.5	190.50	184.15	73.025	177.80	19.500	142.75	5.09
4051	957.07	174.75	406.40	349.25	---	116.50	184.15	184.15	73.025	177.80	19.500	142.75	5.09
4441	1208.02	209.55	482.60	---	---	368.30	227.08	215.80	85.725	208.50	22.225	174.75	7.00
4443	1208.02	209.55	482.60	---	---	368.30	227.08	215.80	85.725	208.50	22.225	174.75	7.00
4451	1113.03	209.55	482.60	---	---	131.83	120.65	120.65	14.300	15.875	76.20	6.93	7.96
4453	1113.03	209.55	482.60	419.10	---	131.83	120.65	120.65	14.300	15.875	76.20	6.93	7.96

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2-W-1,
W-4-W-5-W-7, OR C-1 MOUNTING IS SPECIFIED.
- (2) "D" VARIES — 250T — 320T + 0, —.8
360T — 440T + 0, —1.5
- (3) "U" VARIES — 41.2T DIA. +.000, —.013
41.2T AND LARGER +.00, —.03
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL
MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
- (6) "N-W" VARIES + 0, —6.35

FRAME _____ TYPE _____ CERTIFIED FOR _____
 ORDER _____ ITEM _____ HP _____ PH _____ HZ _____ VOLTS _____
 SALES ORDER _____ APPROVED BY _____ DATE _____

611740-200-SH2

611740-200-SH2

Baldor • Dodge • Reliance

DIM SHT 250T-440T TEFC BEI HS35 TACH

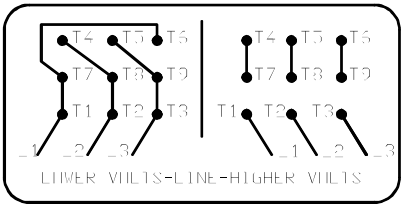
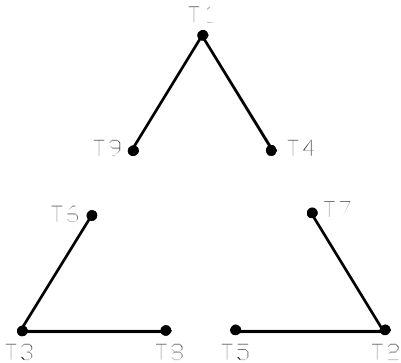
SH 1 of 1

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

REV. DESC: ASSIGNED TO BUSLOAD		
REV. LTR: -	VERSION: 00	TDR: 000000466684
FILE: \RAG\00006\682	REVISED: 12:02:49 06/04/2008	BY: RAGRXX
MTL: -		

416820-002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED



(N.P. 1575-B)

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\661	REVISED: 02:46:19 02/13/2020	BY: MGHMTT
MTL: —		

BALDOR - RELIANCE®

CONN DIAG — STANDARD 9 LEAD, DELTA-CONNECTED
SH 1 of 1

416820-002