

**BALDOR® • RELIANCE** 

**Product Information Packet**

**SUM70754-4**

**7.50HP,1730RPM,3PH,60HZ,180TY,TENV,FOOT**

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	E02757A A 010	CD Diagram:	416820-001	Mfg Plant:	
Mech. Spec:		Layout:	066930-017	Poles:	04	Created Date:	04-09-2015
Base:		Eff. Date:	11-29-2017	Leads:			

Specs			
Catalog Number:	SUM70754-4	Duty Rating:	15 MIN IN AIR ;SUB. IN
Enclosure:	TEXP	Heater Indicator:	No Heater
Frame:	180TY	Insulation Class:	F
Frame Material:	Iron	Inverter Code:	Inverter Ready
Output @ Frequency:	7.500 @ 60 HZ	KVA Code:	H
Voltage @ Frequency:	230 V @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
	460 V @ 60 HZ	Motor Type:	M
XP Class and Group:	None	Mounting Arrangement:	V1
XP Division:	Not Applicable	Product Family:	Other
Agency Approvals:	CCSA US	Pulley End Bearing Type:	Ball
	CSA	Pulley Face Code:	Standard
	UL	Shaft Rotation:	Reversible
Base Indicator:	No Mounting	Shaft Slinger Indicator:	No Slinger
Bearing Grease Type:	Polyrex EM (-20F +300F)	Speed Code:	Single Speed
Current @ Voltage:	10.1 A @ 460 V	Motor Standards:	NEMA
	20.2 A @ 230 V	Starting Method:	Direct on line
Design Code:	B	Thermal Device - Winding:	Normally Closed Thermostat
Drip Cover:	No Drip Cover	XP Temp Code:	T3C

Nameplate 000613007AC		
CLASS I GROUP	C D X	NO. <input type="text"/>
CLASS II GROUP	X X X	
OPERATING TEMP CODE	T3C	

<b>Nameplate 000613007MN</b>									
<b>CAT NO</b>	SUM70754-4			<b>SPEC NO.</b>	P18G2704				
<b>HP</b>	7.5	<b>AMPS</b>	20.2/10.1		<b>VOLTS</b>	230/460		<b>DESIGN</b>	B
<b>FRAME SIZE</b>	X0180TY	<b>RPM</b>	1730		<b>HZ</b>	60	<b>AMB</b>	40	
<b>D.E. BRG.</b>	50BC02JPP30A			<b>PH</b>	3		<b>DUTY</b>	15MIN	
<b>O.D.E. BRG.</b>	25BC02JPG30A			<b>TYPE</b>	P		<b>ENCL</b>	TENV	
				<b>POWER FACTOR</b>			<b>NEMA-NOM-EFF</b>		
				<b>MAX CORR KVAR</b>			<b>GUARANTEED EFFICIENCY</b>		
					<b>NEMA NOM/CSA QUOTED EFF @</b>		<b>100% LOAD</b>		
<b>SER.NO.</b>				<b>MOTOR WEIGHT</b>			<b>LBS.</b>		
	*15 MIN IN AIR ;SUB. IN								
	SEWAGE / WATER ONLY ;FINAL								
	CONN 460 VOLT;								

<b>Nameplate 000613007MR</b>									
<b>CAT NO</b>	SUM70754-4		<b>SPEC NO.</b>	P18G2704					
<b>HP</b>	7.5	<b>AMPS</b>	20.2/10.1		<b>VOLTS</b>	230/460		<b>DESIGN</b>	B
<b>FRAME SIZE</b>	X0180TY	<b>RPM</b>	1730		<b>HZ</b>	60	<b>AMB</b>	40	
<b>D.E. BRG.</b>	50BC02JPP30A		<b>PH</b>	3		<b>DUTY</b>	15MIN		
<b>O.D.E. BRG.</b>	25BC02JPG30A		<b>TYPE</b>	P		<b>ENCL</b>	TENV		
			<b>POWER FACTOR</b>						
			<b>MAX CORR KVAR</b>						
			<b>NEMA NOM/CSA QUOTED EFF @</b>						
<b>SER.NO.</b>			<b>MOTOR WEIGHT</b>			<b>LBS.</b>	<b>NEMA-NOM-EFF</b>		
							<b>GUARANTEED EFFICIENCY</b>		
							<b>100% LOAD</b>		
	*15 MIN IN AIR ;SUB. IN								
	SEWAGE / WATER ONLY ;FINAL								
	CONN 460 VOLT;								

Parts List		
Part Number	Description	Quantity
SA297476	SA P18G2704	1.000 EA
RA284445	RA P18G2704	1.000 EA
424476003WB	WIRING DIAGRAM MEDIUMA	1.000 EA
424476003WB	WIRING DIAGRAM MEDIUMA	1.000 EA
000613007AC	UL NAMEPLATE FOR HAZARDOUS LOCATIONS	1.000 EA
000613007MN	NP,MEDIUM AC,NO CERT,STD INDUSTRIAL	1.000 EA
000613007MR	NP, MEDIUM AC, CSA, STD INDUSTRIAL	1.000 EA
000692000EJ	NAME PLATE	1.000 EA
000901001AA	LABEL WARNING	1.000 EA
001575000A	WIRING DIAGRAM	1.000 EA
034692002AE	HCSPP 1/4" 304 S.S.	1.000 EA
004824015A	GREASE POLYREX EM	0.100 LB
032018010CG	HHCS 3/8-16X1-1/4L 316SS V2T23	4.000 EA
032130008CC	HSHCS 3/8-16 X 1.00" L	4.000 EA
032620020JD	HSSS 10-24X5/8L 304S.S.	1.000 EA
034692003AE	PPLG 3/8" 304 S.S.	2.000 EA
047174005B	SNAP RING	1.000 EA
047174005C	SNAP RING	1.000 EA
064262012B	SEAL	1.000 EA
064262012C	SEAL	1.000 EA
032080003JB	HWHMS 10-24X3/8L PLTED	4.000 EA
088204001AA	BRKT,DE,180SUB 88204-1WA	1.000 EA
088205001AA	SUB PLT 180 88205-1WC	1.000 EA
413412004A	SUBM MOISTURE PROBE	2.000 EA

Parts List (continued)		
Part Number	Description	Quantity
413412005R	LEAD WIRE ASSY(BLANKET	1.000 EA
413480001R	RESISTOR ASSEMBLY-BLANKET	1.000 EA
421900124FU	ORING	1.000 EA
421900124FU	ORING	1.000 EA
603760001AA	LABYRINTH	1.000 EA
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 EA
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 EA
034036013AB	LCKW 5/16 EXT.TOOTH LCKW	1.000 EA
047024003AH	T/LUG AMP 34112	4.000 EA
032018008BG	HHCS 5/16-18X1 BRASS-447	4.000 EA
032080003LB	HWHMS 1/4-20X3/8L PLTED	6.000 EA
415031017A	NUT W/WASHER 10-24 C.PLT	4.000 EA
047024003B	T/LUG AMP 33218	9.000 EA
415031017B	NUT W/WASHER1/4-20 C.P	6.000 EA
421900072FU	ORING	1.000 EA
609181014D	HEAT SHRINK TUBING 3/4	10.000 EA
700385014G	CAP AND CABLE ASSY 25FT	1.000 EA
004824007K	SPECIAL PAINT	0.100 EA
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 EA
034180009DD	KEY 1/4X1/4X1-1/8L	1.000 EA
088203001AB	BRKT,ODE,180SUB 88203-1WB	1.000 EA
421900124FU	ORING	1.000 EA
004824018AF	SHELL ROTELLA OIL 10W	1.500 LB
032018006AG	HHCS 1/4-20X3/4L 316 SS	3.000 EA

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032018010CG	HHCS 3/8-16X1-1/4L 316SS V2T23	4.000 EA
000901001AA	LABEL WARNING	1.000 EA
B3630-9	SUBM THERMOSTAT TAG	1.000 EA
B-3664002	TAG, (NON REGREASABLE)	1.000 EA

REL. S.O.	FRAME	HP	TYPE	PHASE/HERTZ	RPM	VOLTS
	180TY	7.5	P	3/60	1730	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
20.2/10.1	*	40/F	1.15	B	H	SUB
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES @25 °C OHMS (BETWEEN LINES)		
535642	418424037YE	---	---	.533/2.13		

**PERFORMANCE**


LOAD	HP	AMPERES	RPM	INPUT KW	POWER FACTOR	% EFFICIENCY
NO LOAD	0	3.9	1800	.523	16.8	0
1/4	1.88	4.6	1783	1.96	53.1	71.5
2/4	3.75	6.0	1768	3.47	72.1	80.7
3/4	5.63	7.9	1751	5.07	80.1	82.9
4/4	7.50	10.1	1732	6.76	83.9	82.7
5/4	9.37	12.6	1709	8.59	85.9	81.4

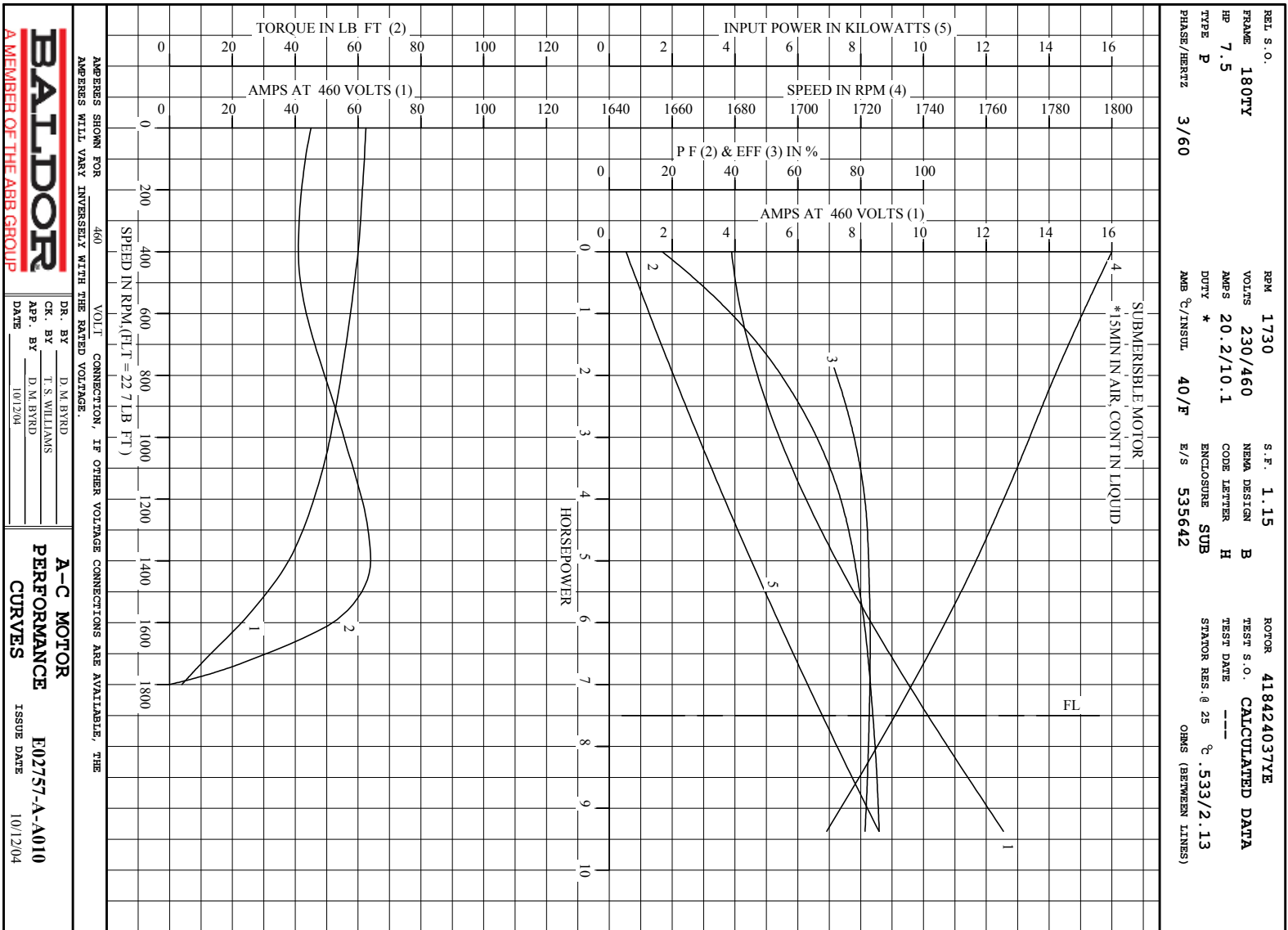
**SPEED TORQUE**

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	198	45.0	62.5
PULL UP	400	180	41.0	60.0
BREAKDOWN	1400	281	64.0	37.9
FULL LOAD	1732	100	22.7	10.1

AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS: CALCULATED DATA  
SUBMERISBLE MOTOR  
\*15MIN IN AIR, CONT IN LIQUID

 <p><b>A MEMBER OF THE ABB GROUP</b></p>	DR. BY	D. M. BYRD	<p><b>A-C MOTOR PERFORMANCE DATA</b></p> <p>E02757-A-A010</p> <p>ISSUE DATE 10/12/04</p>
	CR. BY	T. S. WILLIAMS	
	APP. BY	D. M. BYRD	
	DATE	10/12/04	



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A MEMBER OF THE ABB GROUP

DR. BY D.M. BYRD  
CK. BY T.S. WILLIAMS  
APP. BY D.M. BYRD  
DATE 10/12/04

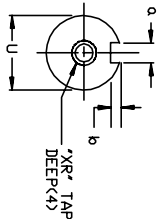
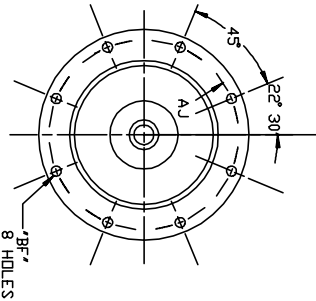
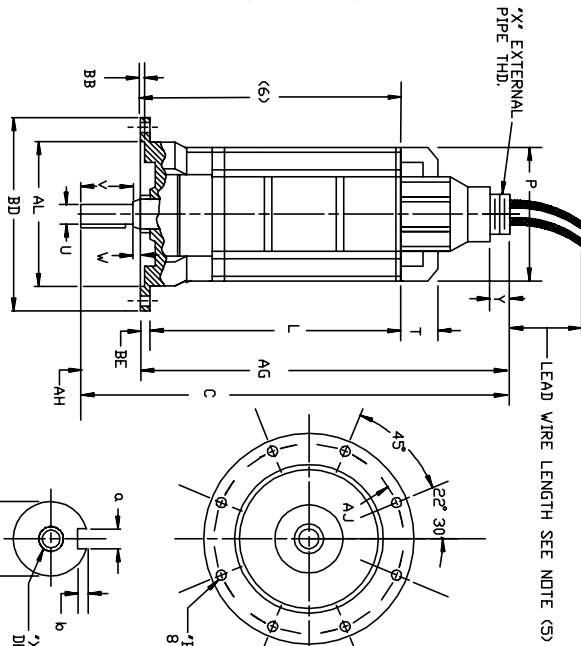
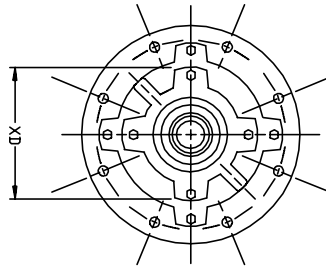
**A-C MOTOR PERFORMANCE CURVES**  
E02757-A-A010  
ISSUE DATE 10/12/04

Printed on 8/26/15 15:00 @ bengap01.baldor.com

066930-017

**DUTY MASTER ALTERNATING CURRENT MOTORS**  
 SQUIREL-CAGE INDUCTION  
 ENCLOSURE: TOTALLY ENCLOSED  
 SUBMERSIBLE  
 FRAME 140TY THRU 180TY

066930-017



DIMENSIONS ARE IN INCHES SEE SHEET 2 FOR MILLIMETERS

FRAME	C	L	P	T	U(3)	V	W	AG	AH	AJ	AL(7)
140TY	25.44	15.38	8.00	2.25	8.750	1.25	.31	23.88	1.59	10.00	9.125
180TY	26.66	16.56	9.62	2.25	12500	2.00	.28	24.38	2.28	11.50	10.625

FRAME	BD(2)	BE	BF	XR(4)	LEAD CONNECTION			B.E. KEYWAY		LENGTH	WEIGHT	
					X	Y	XD	a	b			
140TY	11.062	.75	.44	3/8-16	2-1/2-8	1.25	5.50	.12	.187	.09	1.25	1.60
180TY	12.375	.75	.56	1/2-13	2-1/2-8	1.25	6.75	.12	.250	.12	1.12	2.00

- (1) SPECIAL DIMENSIONS ON THIS LINE.
  - (2) \*BD\* VARIES ± .010.
  - (3) \*U\* VARIES +.0000, -.0005.
  - (4) \*TAP DEPTH DN 140TY IS .89 180TY IS 1.38
  - (5) LEAD WIRE LENGTH AS SPECIFIED ON CERTIFICATION
  - (6) MINIMUM SUBMERGED DEPTH.
  - (7) \*AL\* VARIES +.004, -.000.
- FACE ROUNDT AND ECCENTRICITY .008 MAX. T.I.R.  
 PROTECTIVE CONDUIT FURNISHED BY CUSTOMER.

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

REV. DESC: CHANGE L DIM FROM 16.50 TO 16.56 (SH1)	VERSION: 01	TDR: 000000837009
REV. LTR: A	REVISED: 09:10:21 01/30/2014	BY: RGGWT
FILE: \RGG\00016\668		
MTL: -		

**BALDOR**

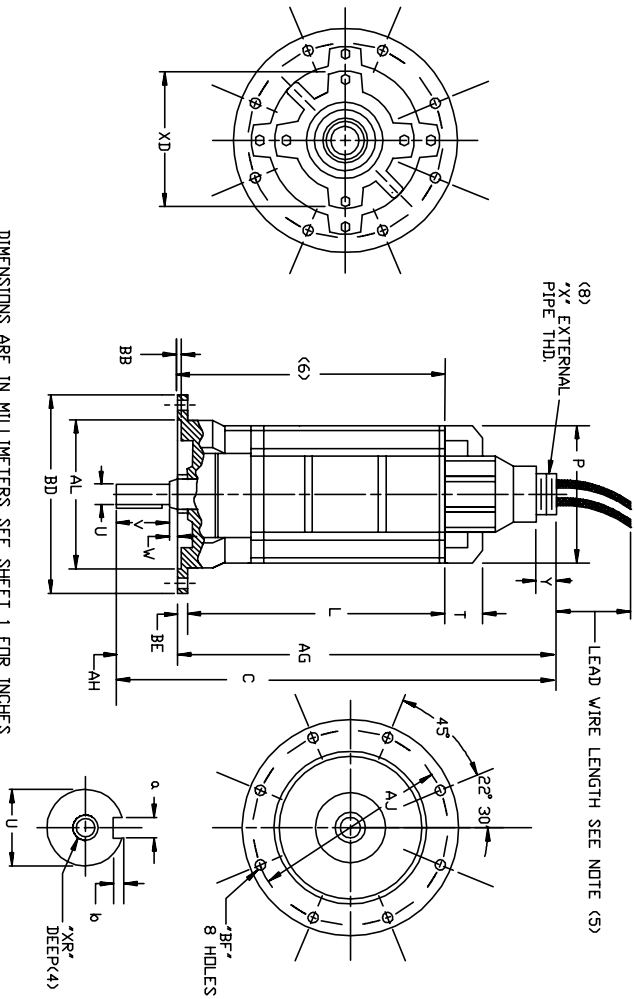
DIM SHT 140TY THRU 180TY

SH 1 of 2

066930-017

**DUTY MASTER ALTERNATING CURRENT MOTORS**  
 SQUIRREL-CAGE INDUCTION  
 ENCLOSURE: TOTALLY ENCLOSED  
 SUBVERSIBLE  
 FRAME 140TY THRU 180TY

066930-017



DIMENSIONS ARE IN MILLIMETERS SEE SHEET 1 FOR INCHES

FRAME	C	L	P	T	U(3)	V	W	AG	AH	AJ	AL(7)
140TY	646.2	390.7	203.2	57.1	22.25	31.7	7.9	60.6	40.4	254.0	231.77
180TY	677.2	419.1	244.3	57.1	31.750	50.8	7.1	61.9.3	57.9	292.1	269.88

FRAME	BX(2)	BE	BF	XR(4)	LEAD CONNECTION			BB	KEYWAY			KG
					XC(8)	Y	XD		a	b	WEIGHT	
140TY	280.97	19.0	11.2	3/8-16	2-1/2-8	31.7	139.7	3.0	4.75	2.3	72.7	
180TY	314.32	19.0	14.2	1/2-13	2-1/2-8	31.7	171.5	3.0	6.35	3.0	90.9	

(1) SPECIAL DIMENSIONS ON THIS LINE.

(2) \*BD\* VARIES ± .25

(3) \*U\* VARIES +.000, -.013

(4) TAP DEPTH DN 140TY IS 22.3 MM; 180TY IS 35 MM.

(5) LEAD WIRE LENGTH AS SPECIFIED ON CERTIFICATION

(6) MINIMUM SUBMERGED DEPTH.

(7) \*AL\* VARIES +.10, -.000.

(8) THREAD DIMENSIONS IN INCHES  
 FACE ROUNDT AND ECCENTRICITY .20 MAX. T.I.R.  
 PROTECTIVE CONDUIT FURNISHED BY CUSTOMER

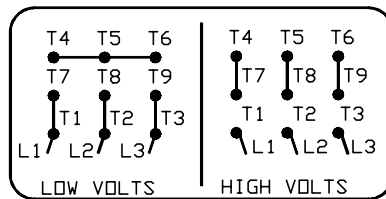
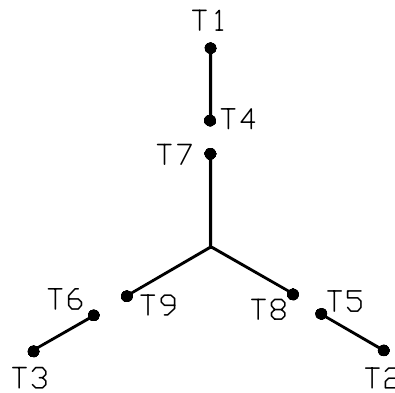
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: CHANGE L DIM FROM 16.50 TO 16.56 (SH1)			<b>BALDOR</b>
REV. LTR: A	VERSION: 01	TDR: 000000837009	
FILE: \RGG\00016\668	REVISED: 09:10:21 01/30/2014	BY: RGGWT	
MTL: -			

DIM SHT 140TY THRU 180TY  
SH 2 of 2

416820-001

A-C MOTOR  
 CONNECTION DIAGRAM  
 STANDARD 9 LEAD Y CONNECTED



< N. P. 1575-A >

416820-001

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\659	REVISED: 10:33:07 12/21/2016	BY: MGHMTT
MTL: -	⊙ □	

**BALDOR**

CONN DIAG - STANDARD 9 LEAD, Y CONNECTED

SH 1 of 1

Marketing maintained PDF of MN414:

<http://www.baldor.com/support/Literature/Load.ashx/MN414?ManNumber=MN414>

