

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **EM4416T-4**

**200HP/3570RPM/3PH/447TS/SUPER-E**

Copyright © All product information within this document is subject to Baldor Electric Company copyright © protection, unless otherwise noted.

Part Detail							
Revision:	H	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	A44104M	Elec. Spec:	A44WG3376	CD Diagram:	
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:		Layout:	
Frame:	447TS	Mounting:	F1	Poles:	02	Created Date:	12-20-2010
Base:		Rotation:	R	Insulation:	F	Eff. Date:	06-18-2012
Leads:	3#1 (02 per group)	Literature:		Elec. Diagram:		Replaced By:	

Nameplate NP2380L									
CAT.NO.	EM4416T-4	SPEC NO.	P44G5691						
HP	200	AMPS	213	VOLTS	460	DESIGN	B		
FRAME	447TS	RPM	3570	HZ	60	AMB	40	SF	1.15
DRIVE END BEARING	65BC03J30X	PHASE	3	DUTY	CONT	INSUL.CLASS	F		
OPP D.E. BEARING	65BC03J30X	TYPE	P	ENCL	TEFC	CODE	G		
SER.NO.		POWER FACTOR	91	NEMA-NOM-EFFICIENCY	95.4				
		MAX CORR KVAR	21.0	GUARANTEED EFFICIENCY	94.5				
		NEMA NOM/CSA QUOTED EFF							
		MOTOR WEIGHT							

Parts List		
Part Number	Description	Quantity
SA213658	SA P44G5691	1.000 EA
RA200878	RA P44G5691	1.000 EA
421948051	LABEL, MYLAR	1.000 EA
000692000FF	N/P (RELEASE QTY 1,000)	1.000 EA
000692000VD	N/P (REL QTY 4000)	1.000 EA
NP2380L	SUPER-E ,SS, CSA-C US, CSA EEV	1.000 EA
089490097A	BRKT 089490102WCA	1.000 EA
415072001B	CLAMP	1.000 EA
083199082RA	G28 FAN COVER W/BAFFLE ASSY 83199-82A	1.000 EA
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 EA
412118006A	DRAIN	1.000 EA
032018012BK	HHCS 5/16-16X1-1/2PLATED	4.000 EA
702675001D	FAN 250-440	1.000 EA
004824015A	GREASE POLYREX EM	0.540 LB
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 EA
032018008CK	HHCS 3/8-16X1L PLATED	4.000 EA
032018028CK	HHCS 3/8-16X3-1/2 PLTD.	3.000 EA
415096002A	CPLG 1/8 HEX TYPE	1.000 EA
034630002AB	CPLG 1/4" PLATED	1.000 EA
410700004F	WSHR	1.000 EA
034530072BB	PIPE NIPPLE,DE - 440-BS	1.000 EA
034530072AB	P/NIP 1/8X9"L GALV.	1.000 EA
034690005AB	PPLG 3/4 PLATED	2.000 EA
034690002AB	PPLG 1/4" PLTD.	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
034630002AB	CPLG 1/4" PLATED	1.000 EA
034530008CA	PIPENIPPLE 3/8X1PLAIN-447	1.000 EA
034530072BB	PIPE NIPPLE,DE - 440-BS	1.000 EA
034690002AB	PPLG 1/4" PLTD.	1.000 EA
702623012R	THERM BAR, G28 70263-12A	1.000 EA
032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 EA
034000013AB	WSHR 5/16" PLATED-440	3.000 EA
089490097A	BRKT 089490102WCA	1.000 EA
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 EA
032018022CK	HHCS 3/8-16X2-3/4 PLTD	3.000 EA
415045002E	SLGR	1.000 EA
412118006A	DRAIN	1.000 EA
034530072AB	P/NIP 1/8X9"L GALV.	1.000 EA
415096002A	CPLG 1/8 HEX TYPE	1.000 EA
032018006BK	HHCS 5/16-18X3/4 PLATED	3.000 EA
034017013AB	LCKW 5/16 STD. PLATED	3.000 EA
702658001B	+C/BOX, PAINTED 440	1.000 EA
702658002A	+C/BOX CVR, PAINTED 440	1.000 EA
406056008A	TERBD 440	1.000 EA
418153001A	GASK 440	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
032018008DK	HHCS 1/2-13X1 PLATED	4.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
415000003D	T/LUG 897-777 KPA25/G16	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
033512006LB	HHTTS 1/4-20X3/4 PLTD.	8.000 EA
406099000A	PLUG - FAN COVER 320-440	1.000 EA
033512004LB	HHTTS 1/4-20X1/2 PLTD.	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
415030115A	G28 C/BOX 415030114WCA	1.000 EA
032130014DB	HSHCS1/2-13X1-3/4 PLATE	4.000 EA
034000016AB	WSHR .531ID 1.062OD .095	4.000 EA
MG1000Y03	WILKO 689.710 GOLD PAINT SUPER E	0.375 GA
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 EA
034180024HA	KEY 5/8X5/8X3 L	1.000 EA
LB1346	LABEL,SUPER-E GP(4X4)	1.000 EA
PK5006A01	WOOD BASE 447 60 X 41-1/2 BLT 20 X 18	1.000 EA
415039027A	GASKET, G28 LEAD THROAT	2.000 EA

Accessories		
Part Number	Description	Multiplier
089490104B	BRKT,DE 089490103WCA, C-Face	P1
089490108A	D-FLANGE EP MACHINING, G28 W/6313 BRG	

REL. S.O.	FRAME	HP	TYPE	PHASE/HERTZ	RPM	VOLTS
	447T	200	P	3/60	3570	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
213	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
833199	418143005AE	---	---	.0144		

PERFORMANCE

LOAD	HP	AMPERES	RPM	POWER FACTOR %	EFFICIENCY %
NO LOAD	0	41.6	3600	6.61	0
1/4	50.0	74.6	3593	66.9	93.9
2/4	100	116	3586	83.9	96.0
3/4	150	164	3578	88.8	96.3
4/4	200	215	3571	90.5	96.2
5/4	250	269	3562	90.8	95.9

SPEED TORQUE

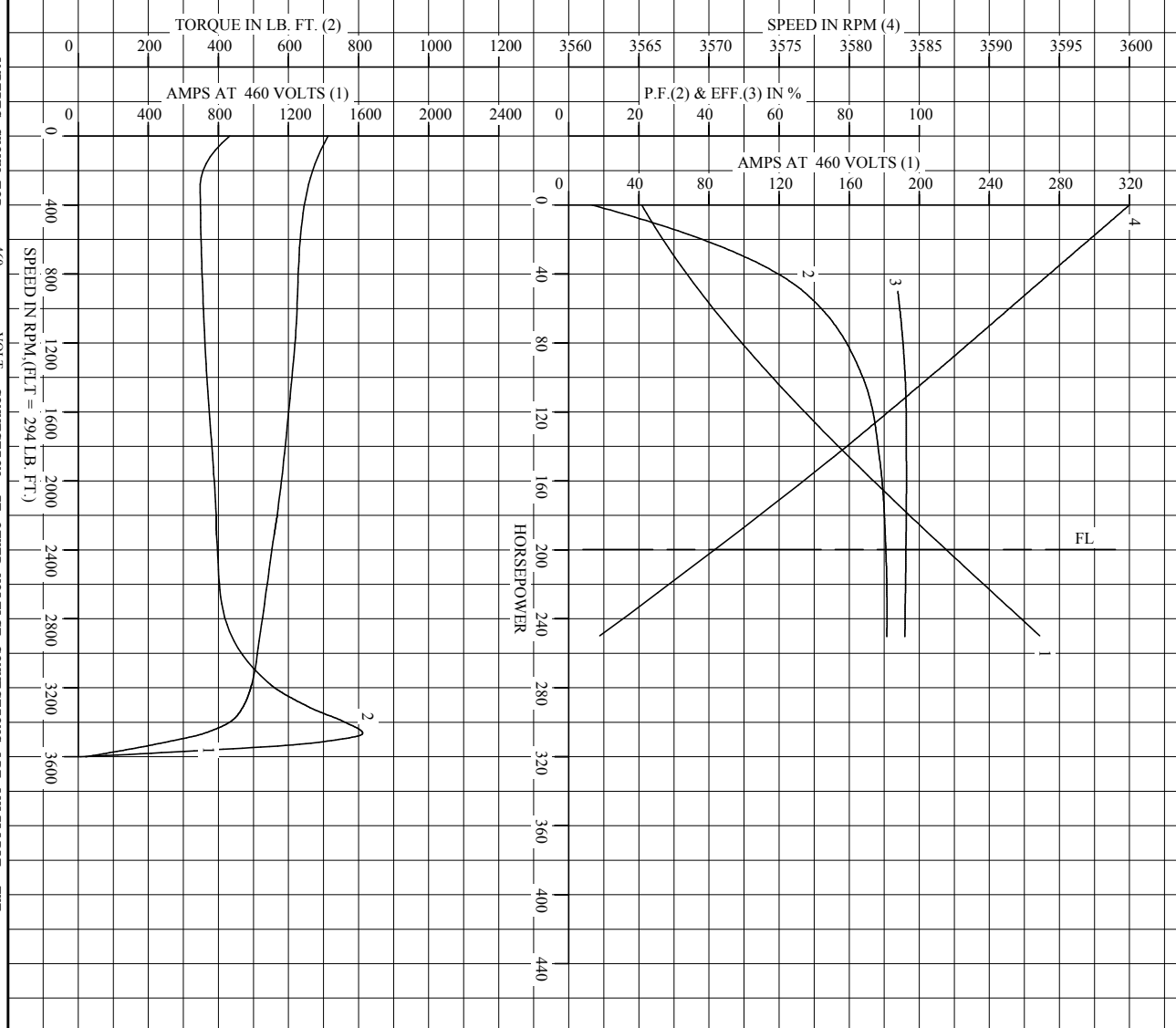
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	147	432	1426
PULL UP	288	119	349	1313
BREAKDOWN	3464	276	812	716
FULL LOAD	3571	100	294	215

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

REMARKS: CALCULATED DATA

<b>BALDOR</b>	DR. BY	W. L. SMITH	<b>A-C MOTOR PERFORMANCE DATA</b>
	CK. BY	J. J. HARRISON	
	APP. BY	W. L. SMITH	ISSUE DATE
	DATE	08/04/10	08/04/10

REL. S. O. \_\_\_\_\_ RPM 3570 S.F. 1.15 ROTOR 418143005AE  
 FRAME 447T VOLTS 460 NEMA DESIGN B TEST S.O. CALCULATED DATA  
 HP 200 AMPS 213 CODE LETTER G TEST DATE ---  
 TYPE P DUTY CONT ENCLOSURE TFFC STATOR RES. @ 25 °C .0144  
 PHASE/HERTZ 3/60 AMB °C/INSUL 40/F E/S 833199 OHMS (BETWEEN LINES)



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



DR. BY W.L. SMITH  
 CK. BY J.H. HARRISON  
 APP. BY W.L. SMITH  
 DATE 08/04/10

**A-C MOTOR**  
**PERFORMANCE**  
**CURVES**  
 A44W/G3376-R001  
 ISSUE DATE 08/04/10

Printed on 2/3/11 14:19 @ usmghengdev1





## DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

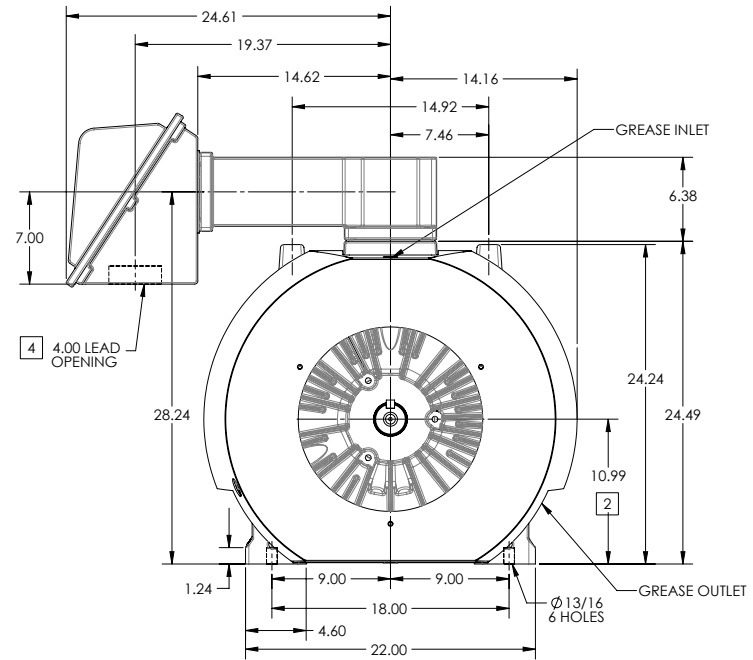
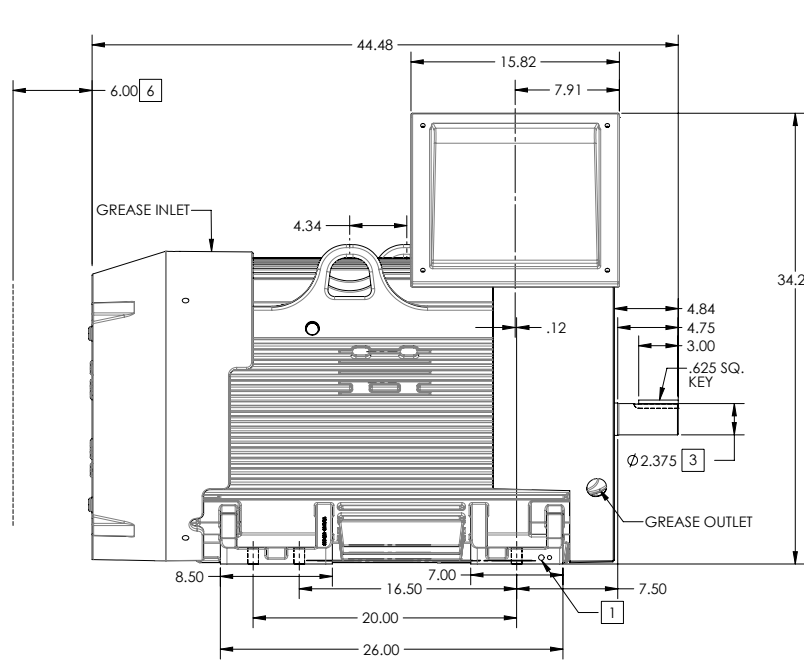
ENCLOSURE: TOTALLY ENCLOSED

FRAME G447TS ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445TS FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-.06
3. VARIES +.00,-.001
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.  
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.  
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003" T.I.R. TO 5 INCH DIA.

WEIGHT (LBS): 2495

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

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

REV. C	VERSION: 03	REVISED-01-22-18 10/17/2012	TDR: 00000766357
MODEL NO. 617423-009	BY: RAGBCS	Material:	REF:

**BALDOR**

DIM SHEET G447TS/G445TS

617423-009

## DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

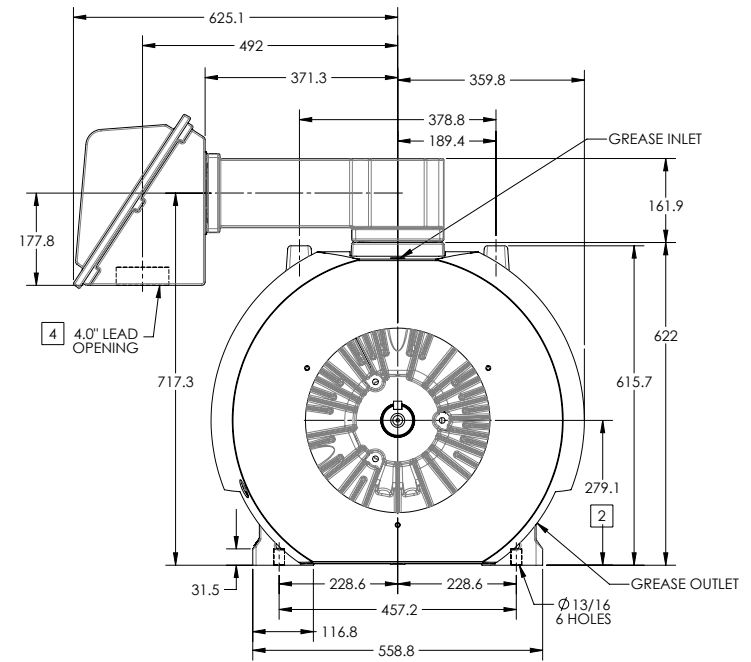
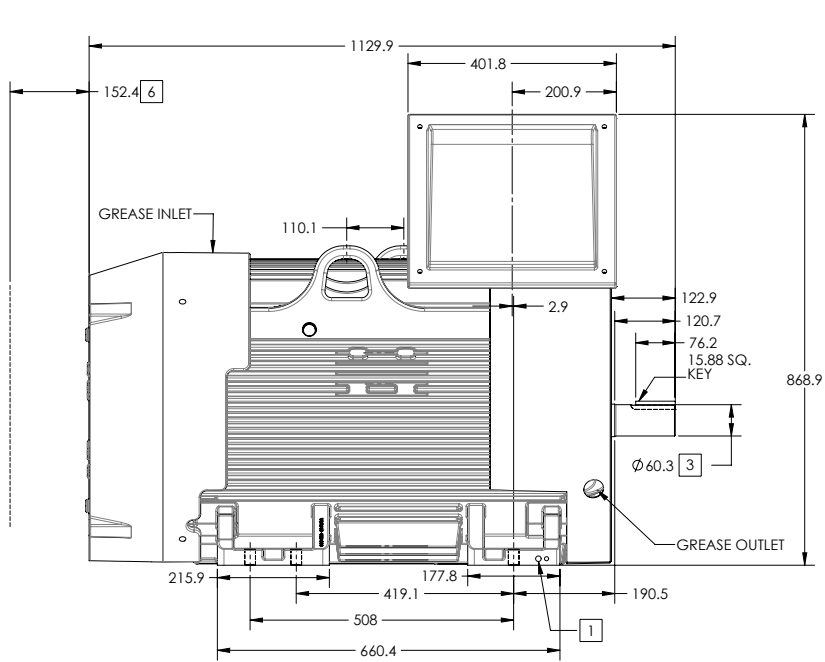
ENCLOSURE: TOTALLY ENCLOSED

FRAME G447TS ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445TS FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-.06
3. VARIES +.00,-.001
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.  
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.  
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .08 MM T.I.R. TO 127 MM DIA.

WEIGHT (KGS): 1132

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES

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

REV. DESC: ADD GREASE INLET/ OUTLET NOTE		REVISED: 01-22-18 10/17/2012		TDR: 00000766357
REV: C	VERSION: 03			REF:
MODEL NO. 617423-009				
BY: RAGBCS	Material:			

**BALDOR**

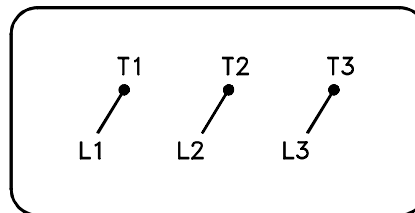
DIM SHEET G447TS/G445TS

600-ECZ119

617423-009

416820-036

A-C MOTOR  
 CONNECTION DIAGRAM  
 STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682	REVISED: 11:54:06 04/30/2010	
MTL: -	BY: RAGRA	

**BALDOR**

CONN DIAG - STANDARD 3 LEAD

SH 1 of 1