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# Customer information packet

## ECP84316T-5

75HP, 1780RPM, 3PH, 60HZ, 365T, A36070M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

## Specifications

Enclosure	TEFC
Frame	365T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	15-60
Current @ Voltage	69.000 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	69.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs

## Part detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4078
Layout	617428-603
Eff. date	02-20-2023
CD Diagram	416820-036
Poles	04
Leads	3#4
Proprietary	False
Created date	04-26-2021

<b>Max Speed</b>	2700 rpm
<b>Motor Lead Quantity/Wire Size</b>	3 @ 4 AWG
<b>Motor Standards</b>	None
<b>Motor Type</b>	A36070M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	33.49 IN
<b>Power Factor</b>	86
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	2.375 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Phase Seq-Std Rot (CCWODE)
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1780 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None

**Nameplate**

<b>NP4388</b>														
<b>CAT #</b>	ECP84316T-5					<b>FR</b>	365T			<b>IP56</b>				
<b>SPEC</b>	A36-6000-4078					<b>ENCL</b>	TEFC		<b>DES</b>	B				
<b>HZ</b>	60	<b>PH</b>	3	<b>CL</b>	F	<b>HP</b>	75	<b>SF</b>	1.15	<b>PF</b>	86	<b>%</b>	<b>CODE</b>	G
<b>VOLTS</b>	575					<b>AMPS</b>	69							
<b>RPM</b>	1780		<b>MAX RPM</b>	2700		<b>SER</b>								
<b>NEMA NOM. EFF</b>	95.4	<b>%</b>	<b>RATING</b>	40C AMB-CONT										
<b>GUAR MIN. EFF</b>	94.5	<b>%</b>	<b>BRG DE</b>	6313		<b>BRG ODE</b>	6313							
<b>CL I DIV 2 GRPS A,B,C,D</b>						<b>CL I ZONE 2 GRPS</b>			<b>IIA,IIB,IIC</b>	<b>TEMP T</b>	3-200		<b>C</b>	
<b>CT HZ</b>	15-60		<b>VT HZ</b>	0-60										
<b>CHP HZ</b>	60-90		<b>INV TEMP CL</b>	200		<b>C</b>								
	SFA 80					<b>MTR WT</b>	985		<b>LBS</b>					

**NP4333**

<b>CAT #</b>	ECP84316T-5	<b>ROTOR BARS</b>	47
<b>SPEC</b>	A36-6000-4078	<b>STATOR SLOTS</b>	60
<b>SER</b>		<b>MAX CORR KVAR</b>	16
<b>GREASE</b>	POLYREX EM		
<b>ABMA DE BRG</b>	65BC03J30X	<b>ODE</b>	65BC03J30X
	SFA 80		

<b>SPACE HEATER LEADS H1-H2:</b>	<b>TIE LIKE NUMBERS</b>		<b>TOGETHER</b>	
<b>MAX. SPACE HEATER TEMP.</b>	C	V	A	W

**AC induction motor performance data**

Record #71925 - Typical performance - not guaranteed values

Winding	A36WG4078
Type	A3670M
Enclosure	TEFC

Nameplate data

Rated Output			75
Volts			575
Full Load Amps			69
R.P.M.			1780
Hz	60	Phase	3
KVA Code			G
S.F.			1.15
NEMA Nom. Eff.	95.4	Power Factor	86
Duty			CONT
S.F. Amps			

575 V, 60 Hz:  
Single Voltage Motor

Full Load Torque	220 LB-FT
Start Configuration	direct on line
Breakdown Torque	619 LB-FT
Pull-up Torque	339 LB-FT
Locked-rotor Torque	431 LB-FT
Starting Current	437 A
No-load Current	22.31
Line-line Res. @ 25°C	0.14 Ω
Temp. Rise @ Rated Load	61°C
Temp. Rise @ S.F. Load	77°C
Locked-rotor Power Factor	32.1
Rotor inertia	16.2 lb-ft <sup>2</sup>

Load Characteristics 575 V, 60 Hz, 75 HP

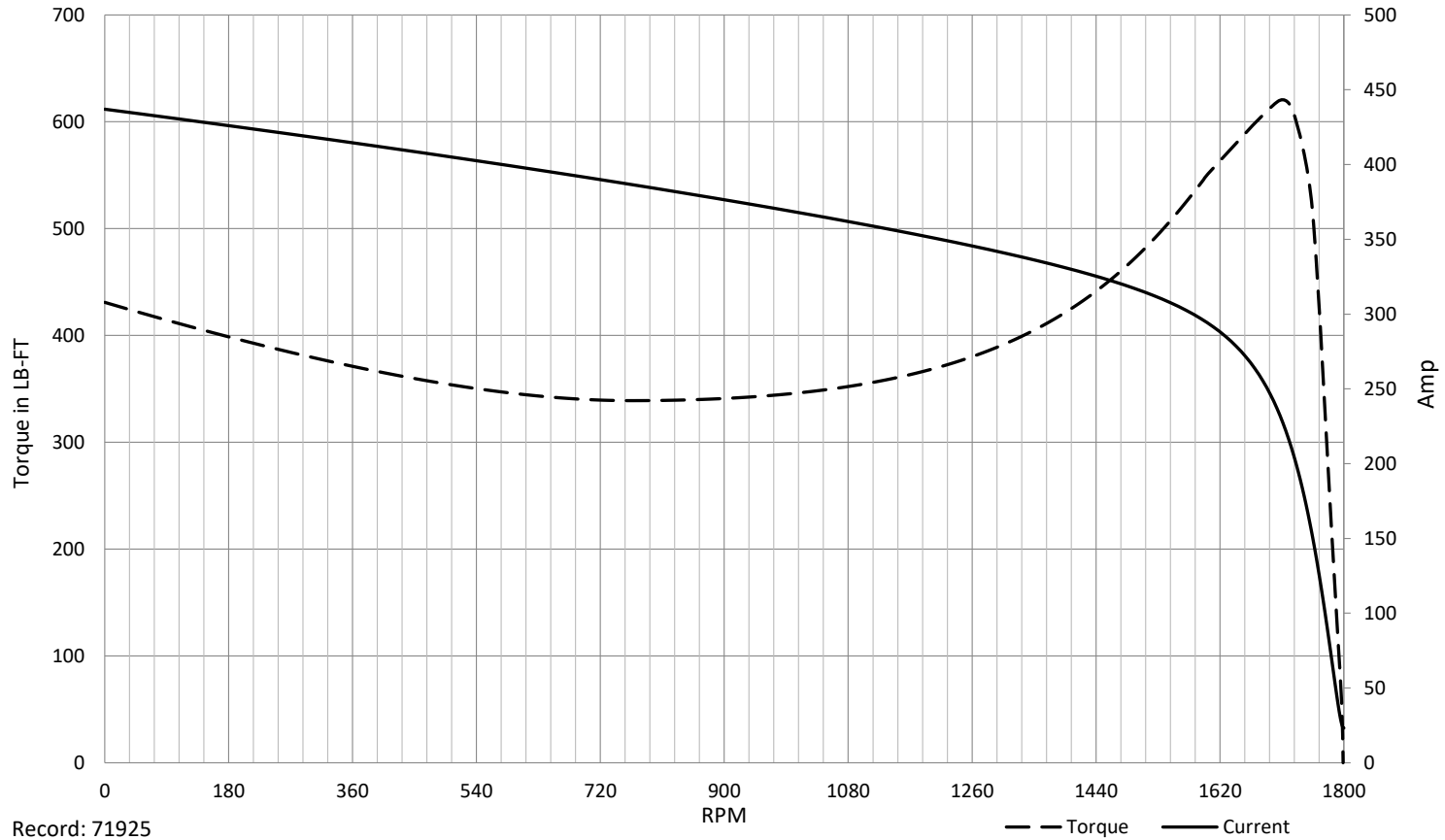
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	54	76	83	86	86	85	86
Efficiency	0	93.7	95.9	95.7	95.4	94.6	93.7	94.8
Speed	1799	1797	1792	1787	1782	1777	1770	1779
Line amperes	22.31	27.39	38.79	53.01	68.52	85.75	105	78.9

SPEED TORQUE / SPEED CURRENT CURVES

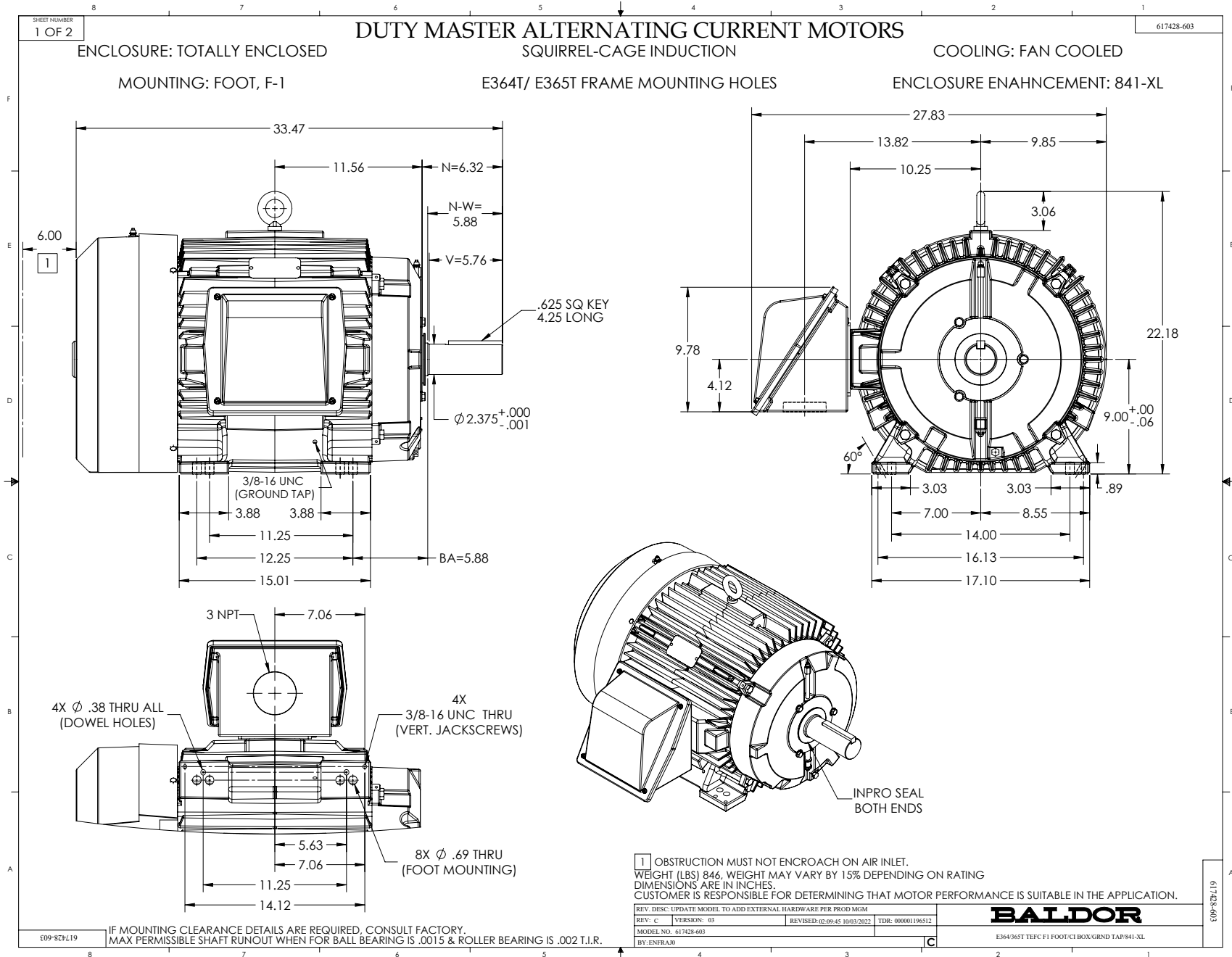


A36WG4078

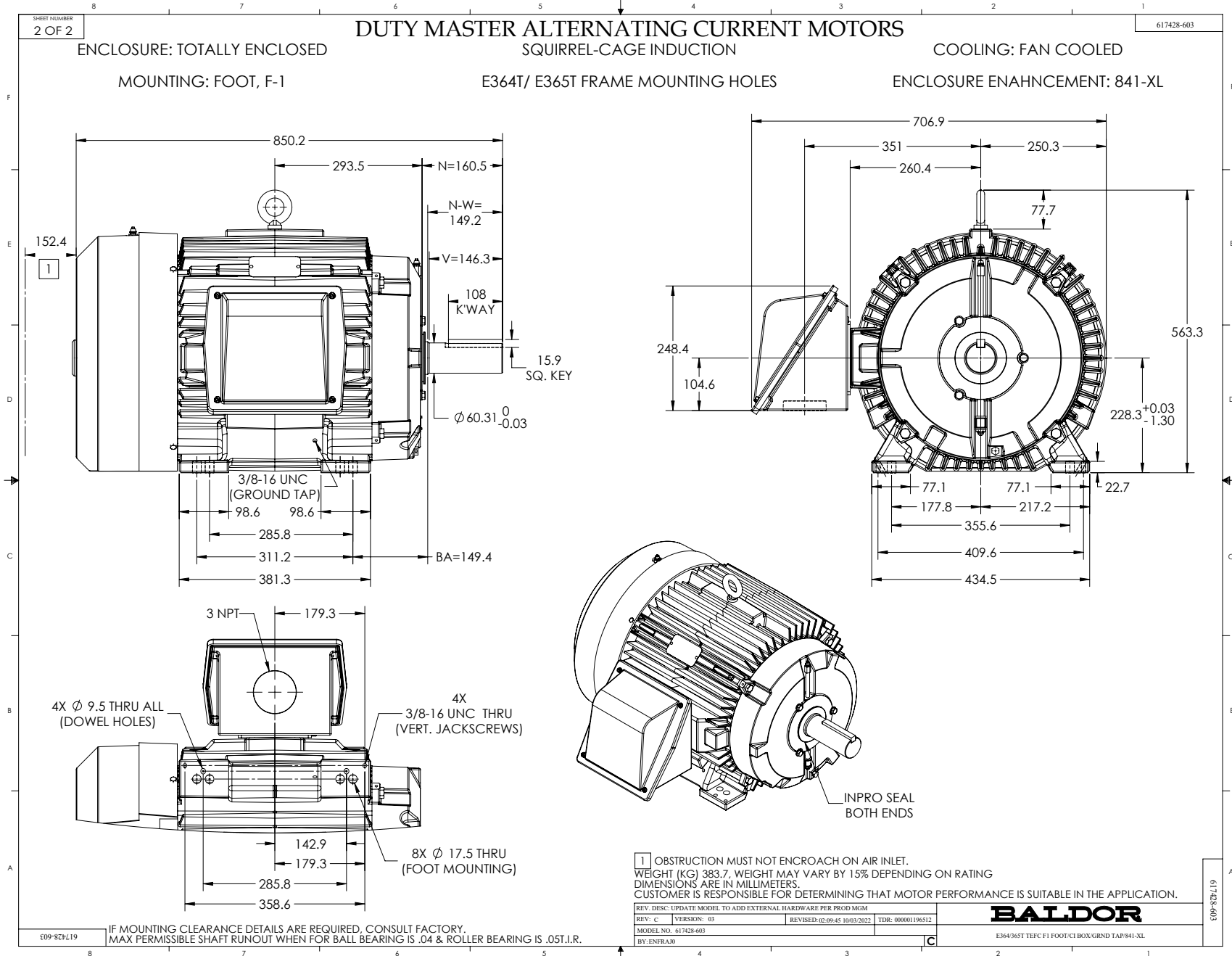
75HP 575V 60HZ



Record: 71925







416820-036

A-C MOTOR  
CONNECTION DIAGRAM  
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

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

416820-036