ABB BALDOR RELIANCE

Customer information packet

EM4402T-4

100HP, 3565RPM, 3PH, 60HZ, 405TS, A40060M, TEF
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	405TS
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	110.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	110.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 4 AWG
Motor Standards	NEMA

Part Detail

Revision	R
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG1270
Layout	617429-002
Eff. date	09-04-2024
CD Diagram	416820-008
Poles	02
Leads	6#4
Proprietary	False
Created date	07-17-2013

Motor Type	A40060M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	35.04 IN
Power Factor	90
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3565 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2349L											
SPEC NO.	P40G3929		**CAT.NO.**	EM4402T-4					**FRAME**	405TS	
HP	100	**VOLTS**	460	**PHASE**	3	**DESIGN**	B	**TYPE**	P		
RPM	3565	**AMPS**	110	**HZ**	60	**AMB**	40	**SF**	1.15		
DRIVE END BEARING	65BC03J30X		**DUTY**	CONT		**INSUL.CLASS**	F				
OPP D.E. BEARING	65BC03J30X		**ENCL**	TEFC	**CODE**	F					
SER.NO.			**POWER FACTOR**	90				**NEMA-NOM-EFFICIENCY**		95	
						MAX CORR KVAR	10	**GUARANTEED EFFICIENCY**			94.1
								NEMA NOM/CSA QUOTED EFF			
									MOTOR WEIGHT		

Accessories

Part number	Description	Multiplier
089413502A	G400 STD C-FACE BRKT 6313 089416511WCA	P1
089412075B	D-FLANGE BRKT 400 089416085WCA	P1

S/O	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405TS	100	P	3/60	3565	460

AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE
110	CONT	40/F	1.15	B	F	TEFC

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)
596954	418142005PE	---	---	.0526

PERFORMANCE

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	25.6	3600	7.58	0
1/4	25.0	36.7	3591	69.7	91.7
2/4	50.0	57.7	3582	85.8	94.6
3/4	75.1	82.7	3572	89.3	95.1
4/4	100	110	3563	89.9	95.0
5/4	125	137	3552	90.2	94.5

SPEED TORQUE

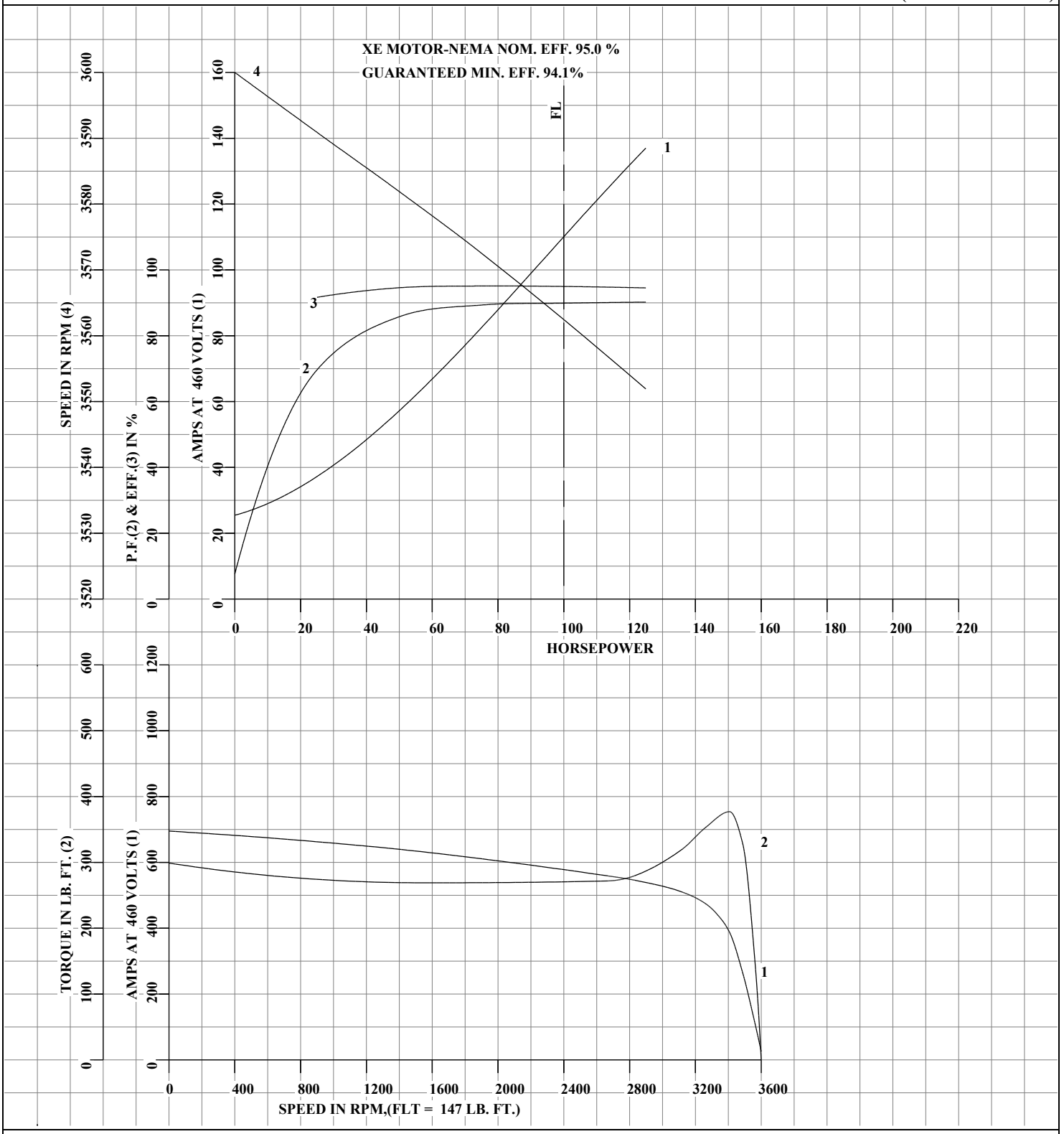
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	203	299	695
PULL UP	1545	182	269	632
BREAKDOWN	3408	256	377	387
FULL LOAD	3563	100	147	110

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

TYPICAL DATA
XE MOTOR-NEMA NOM. EFF. 95.0 %
GUARANTEED MIN. EFF. 94.1%

ABB	DRAWN BY: J.J.HARRISON CHECKED BY: W.L.SMITH APPROVED BY: W.L.SMITH DATE: 06/13/07	AC MOTOR PERFORMANCE DATA	A40WG1270-R001 DATE ISSUED 08/01/18

FRAME 405TS	RPM 3565	S.F. 1.15	ROTOR 418142005PE
HP 100	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
TYPE P	AMPS 110	CODE LETTER F	TEST DATE ---
PHASE / HERTZ 3/60	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25°C .0526
	AMB °C / INSUL 40/F	E/S 596954	OHMS (BETWEEN LINES)



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

ABB	DRAWN BY: J.J.HARRISON CHECKED BY: W.L.SMITH APPROVED BY: W.L.SMITH DATE: 06/13/07	AC MOTOR PERFORMANCE DATA	A40WG1270-R001 ISSUE DATE 08/01/18

617429-002

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

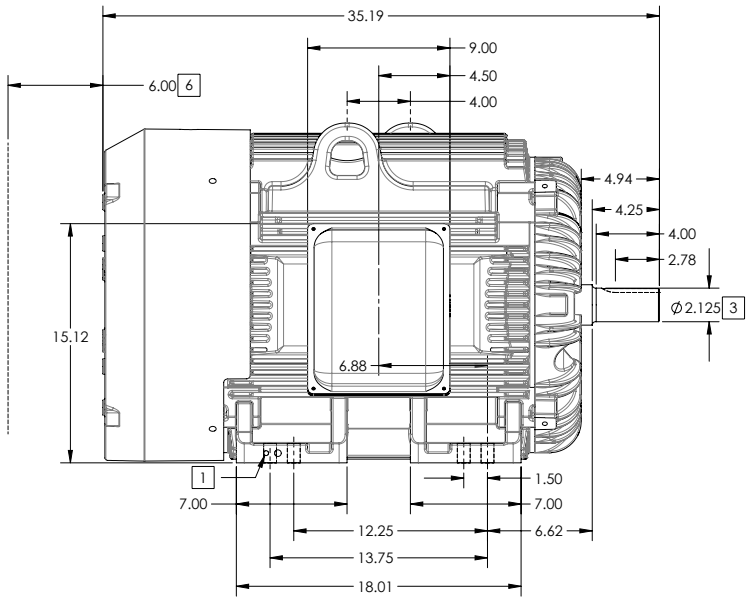
FRAME G405TS ABOVE NEMA RATINGS

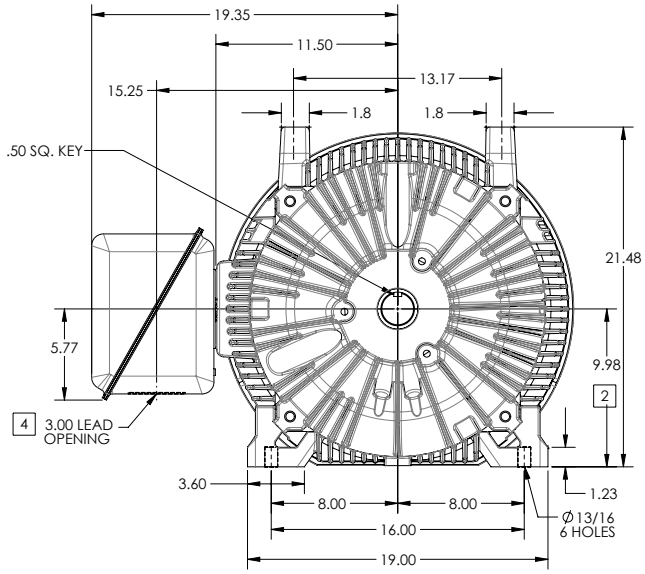
COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404TS FRAME MOUNTING HOLES

STANDARD INDUSTRIAL ENCLOSURE





1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-.06
3. VARIES +.000,-.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 NOT 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.

5 WEIGHT (LBS): 1160

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

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

SHEET NUMBER 1 OF 2

617429-002

REV. DESC: CHANGE BA FROM 6.76 TO 6.62			
REV: B	VERSION: 02	REVISED: 04:37:41 04/14/2014	TDR: 000000848770
MODEL NO. 617429-002			REF:
BY: MGHJMZ2	Material:		C

BALDOR

G405TS/404TS STD – FOOTED – STANDARD ENCLOSURE

617429-002

617429-002

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

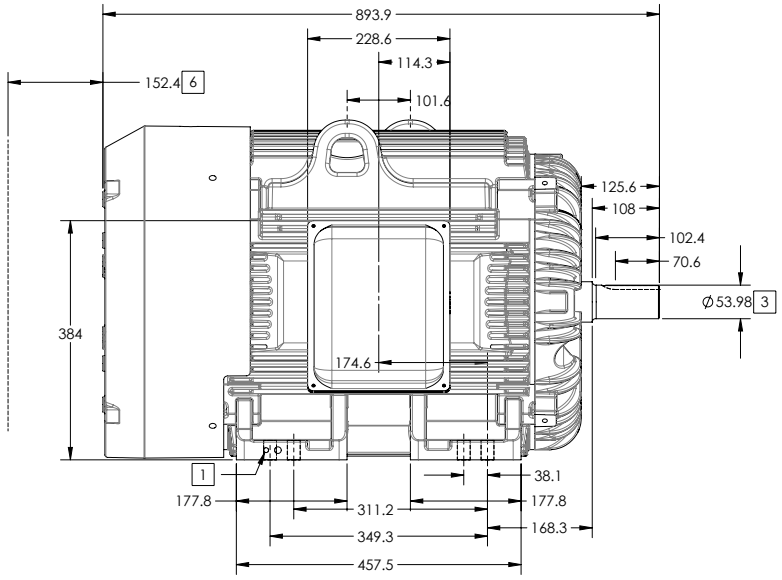
MOUNTING: FOOT

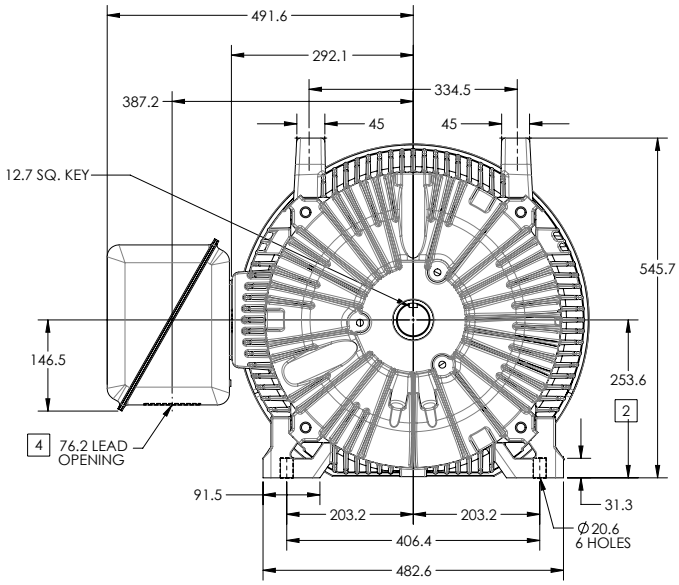
FRAME G405TS ABOVE NEMA RATINGS

INCLUDES 404TS FRAME MOUNTING HOLES

COOLING: FAN COOLED

STANDARD INDUSTRIAL ENCLOSURE





1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.0,-1.5
3. VARIES +.00,-.03
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 NOT 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.

5 WEIGHT (KGS): 530

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

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

SHEET NUMBER 2 OF 2

617429-002

REV. DESC: CHANGE BA FROM 6.76 TO 6.62			
REV: B	VERSION: 02	REVISED: 04:37:41 04/14/2014	TDR: 000000848770
MODEL NO. 617429-002			REF:
BY: MGHJMZ2	Material:		C

BALDOR

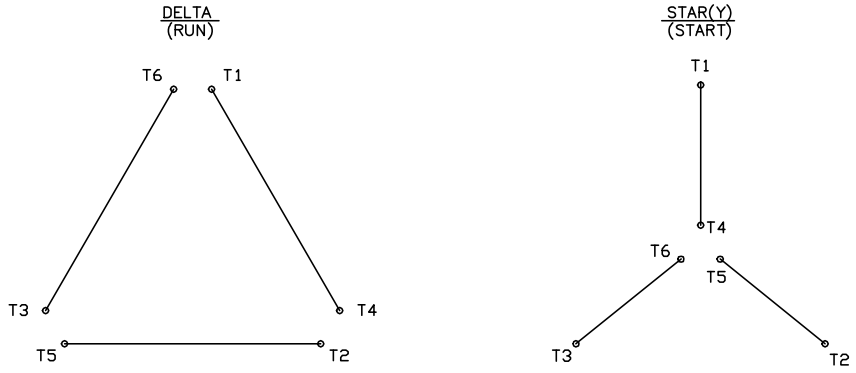
G405TS/404TS STD – FOOTED – STANDARD ENCLOSURE

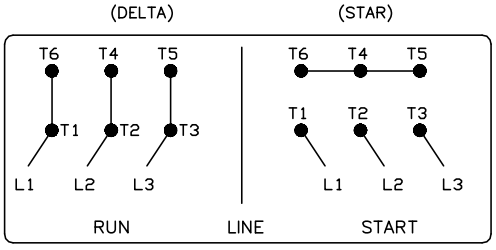
617429-002

416820–008

A–C MOTOR
CONNECTION DIAGRAM

STANDARD 6 LEAD Y START – DELTA RUN





(N. P. 1767-DC)

REV. DESC: ADDED T4 TO Y CONNECT DIAGRAM		
REV. LTR: D	VERSION: 04	TDR: 000000847713
FILE: \RAG\00001\808	REVISED: 10:41:26 04/08/2014	BY: RAGJSS1
MTL: –		

BALDOR

CONNECT DIAGRAM STD 6 LEAD Y START DELTA RUN

SH 1 of 1

416820–008