

21 CONTROL WIRING  
 22 LINE VOLTAGE CONTROL WIRING N50KC41JA #14 BLACK  
 23 CPT VOLTAGE CONTROL WIRING N50KC41HC #16 RED  
 24 N50KC41HB #16 WHITE (WIRE 28)  
 25 CPT GROUND WIRING 55-216961P006 #14 GREEN&YELLOW  
 26 24V DRIVE CONTROL WIRING N50KC41HF #16 BLUE  
 27 DRIVE GROUND WIRING VARIES BY RATINGS. REFER TO BILL OF MATERIAL  
 28 POWER WIRING  
 29 VARIES BY RATINGS. REFER TO BILL OF MATERIAL  
 30 USE 75°C COPPER CONDUCTORS ONLY, FOR FIELD WIRING. TORQUE LINE AND LOAD TERMINALS AS MARKED ON COMPONENT INSTRUCTION SHEET  
 31  
 32  
 33

34 NOTES:  
 5. RELAY1 PROGRAMMED FOR FAULT INDICATION  
 6. RELAY2 PROGRAMMED FOR DRIVE RUN INDICATION  
 7. DRIVE INPUT SIGNALS ARE SHOWN FOR 'PNP' (SOURCE) LOGIC.  
 35  
 36  
 37 9. MINIMAL TIME DELAY OF 10 SECONDS IS NECESSARY PRIOR TO CLOSING THE REMOTE BYPASS CONTACTS, REFER INSTRUCTION SHEETS FOR MORE DETAIL.  
 38

NOTES:  
 1. DRIVE OUTPUT (M2) AND BYPASS (M3) CONTACTORS ARE MECHANICALLY INTERLOCKED.  
 2. DB RESISTORS NOT INCLUDED, DB CHOPPER SIZED FOR 10% DUTY CYCLE.  
 3. DC LINK REACTOR (DCR) IS BUILT INTO THE DRIVE.  
 4. - 'POWER ON' LT1 - 'NORMAL' LT2  
 - 'DRIVE FAULT' LT3 - 'BYPASS RUN' LT4  
 - 'DRIVE RUN' LT5 - 'MOTOR OVERLOAD' LT6 - 'ENABLE' LT7

INDICATING LIGHTS ARE INCLUDED IN THE BASIC INDICATING LIGHT GROUP OPTION

IMPORTANT NOTE: -  
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NOMENCLATURE  
 M1 LINE/ISOLATION CONTACTOR  
 M2 LOAD CONTACTOR  
 M3 BYPASS CONTACTOR  
 INVTR INVERTER  
 LT INDICATING LIGHT  
 E-STOP EMERGENCY STOP PUSH BUTTON  
 CPT CONTROL POWER TRANSFORMER  
 FU CPT PRIMARY FUSE  
 SFU CPT SECONDARY FUSE  
 DSCW DISCONNECT  
 CTB1 CONTROL TERMINAL BOARD  
 OL OVERLOAD RELAY  
 RLY RELAY  
 SSW SELECTOR SWITCH  
 S201&S202 SWITCH (PART OF DRIVE)  
 FSBLK1 FUSE BLOCK  
 SPD POT SPEED POTENTIOMETER  
 ETM ELAPSED TIME METER  
 C1 CONTACTOR FOR CAPACITOR PANEL  
 LDR LOAD REACTOR  
 ACR AC LINE REACTOR  
 CT1 TMR TIME DELAY RELAY FOR CAPACITOR PANEL  
 DB DYNAMIC BREAKING CHOPPER  
 PTB POWER TERMINAL BOARD  
 PB PUSH BUTTON

FOR CSA GROUND KIT, ORDER KIT NUMBER FROM THE FOLLOWING TABLE:

CONDUIT SIZE	KIT NUMBER
1/2-IN CONDUIT	55-213403G001
3/4-IN CONDUIT	55-213403G002
1-IN CONDUIT	55-213403G003
1 1/4-IN CONDUIT	55-213403G004
1 1/2-IN CONDUIT	55-213403G005
2-IN CONDUIT	55-213403G006
2 1/2-IN CONDUIT	55-213403G007

LEGEND  
 CUSTWIRE CUSTOMER LOW LEVEL WIRING < 50V  
 CUSTWIRE CUSTOMER HIGH LEVEL WIRING > 50V THRU 125V  
 CUSTWIRE CUSTOMER POWER WIRING > 125V  
 □ DOOR MOUNTED COMPONENT  
 □ REMOTE MOUNTED COMPONENT  
 △ FACTORY WIRED JUMPER

REV	DESCRIPTION	DATE
6	AN 11-2005	05/18/11

UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS ARE IN INCHES  
 TOLERANCES ON:  
 2 PL DECIMALS ±  
 3 PL DECIMALS ±  
 ANGLES ±  
 FRACTIONS ±

REVISIONS	SIGNATURES	DATE
	DRAWN ANANTVIJAY	06/04/09
	CHECKED	
	ENGRG	
	ISSUED	10/26/10

FORMERLY  
 TOL. PER

CONTROL SELECT

CS	RXD/TXD-P	RXD/TXD-N	OV	5V
62	62	63	66	67

OPTIONAL PROFIBUS / DEVICE NET

OPTIONAL MODBUS TCP/IP / PROFINET

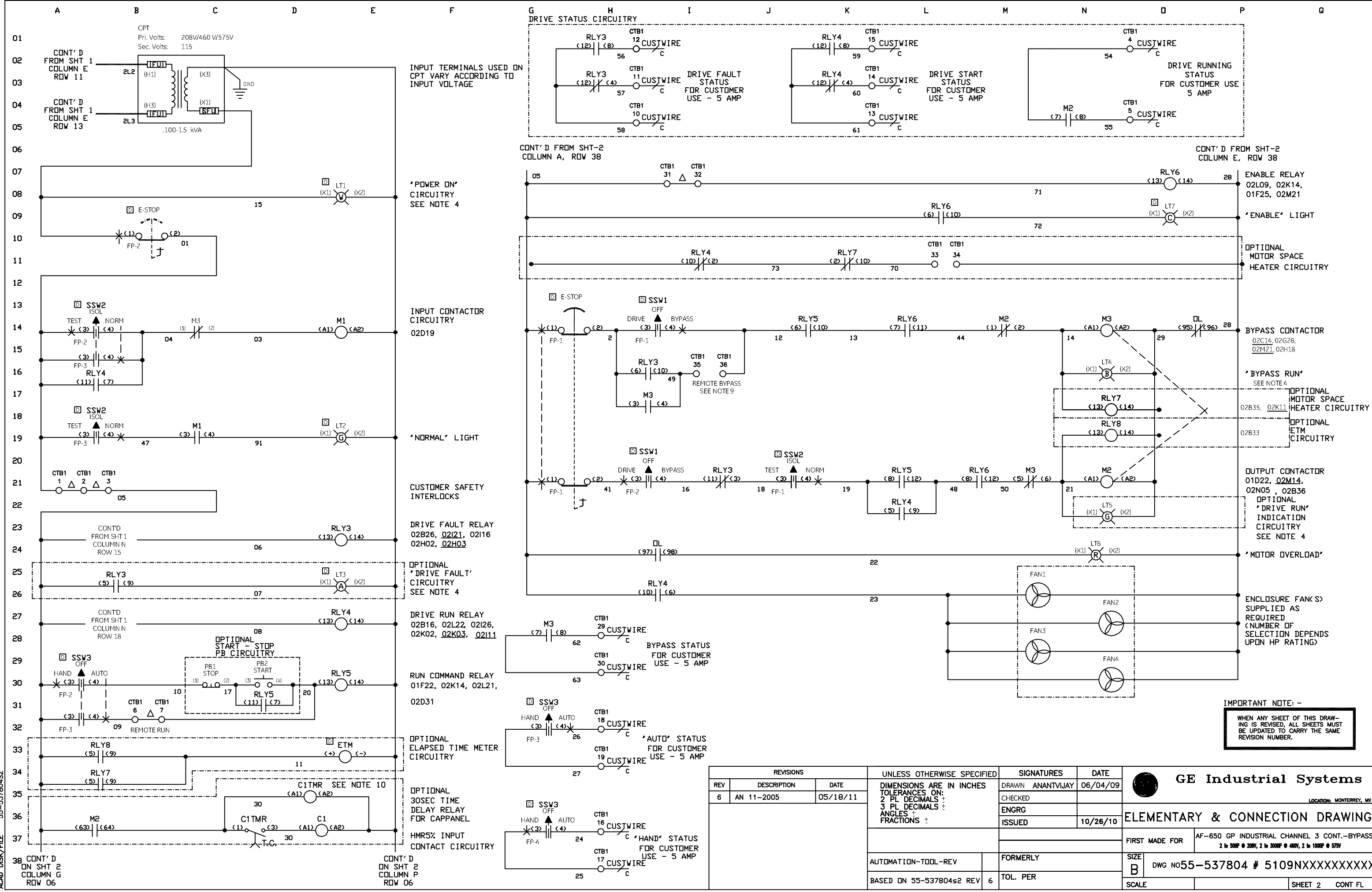
OPTIONAL ETHERNET  
 PORT-1 PORT-2

GE Industrial Systems  
 LOCATION: MONTERREY, MX

ELEMENTARY & CONNECTION DRAWING

FIRST MADE FOR AF-650 GP INDUSTRIAL CHANNEL 3 CONT.-BYPASS  
 2 to 50 HP @ 208V, 2 to 300 HP @ 460V, 2 to 100 HP @ 575V

SIZE B DWG NO 55-537804 # 5109NXXXXXXXXX  
 SCALE SHEET 1 CONT 2



INPUT TERMINALS USED ON CPT VARY ACCORDING TO INPUT VOLTAGE

'POWER ON' CIRCUITRY SEE NOTE 4

INPUT CONTACTOR CIRCUITRY O2D19

'NORMAL' LIGHT

CUSTOMER SAFETY INTERLOCKS

DRIVE FAULT RELAY O2B26, O2I21, O2I16 O2H02, O2H03

OPTIONAL 'DRIVE FAULT' CIRCUITRY SEE NOTE 4

DRIVE RUN RELAY O2B16, O2L22, O2I26, O2K02, O2K03, O2I11

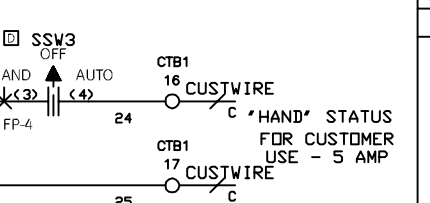
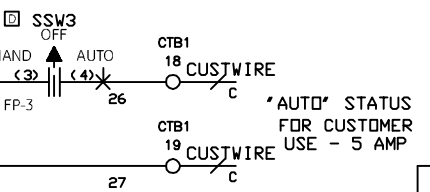
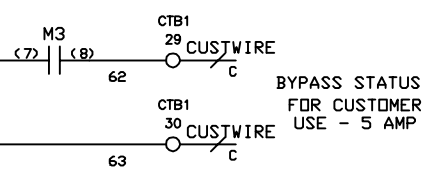
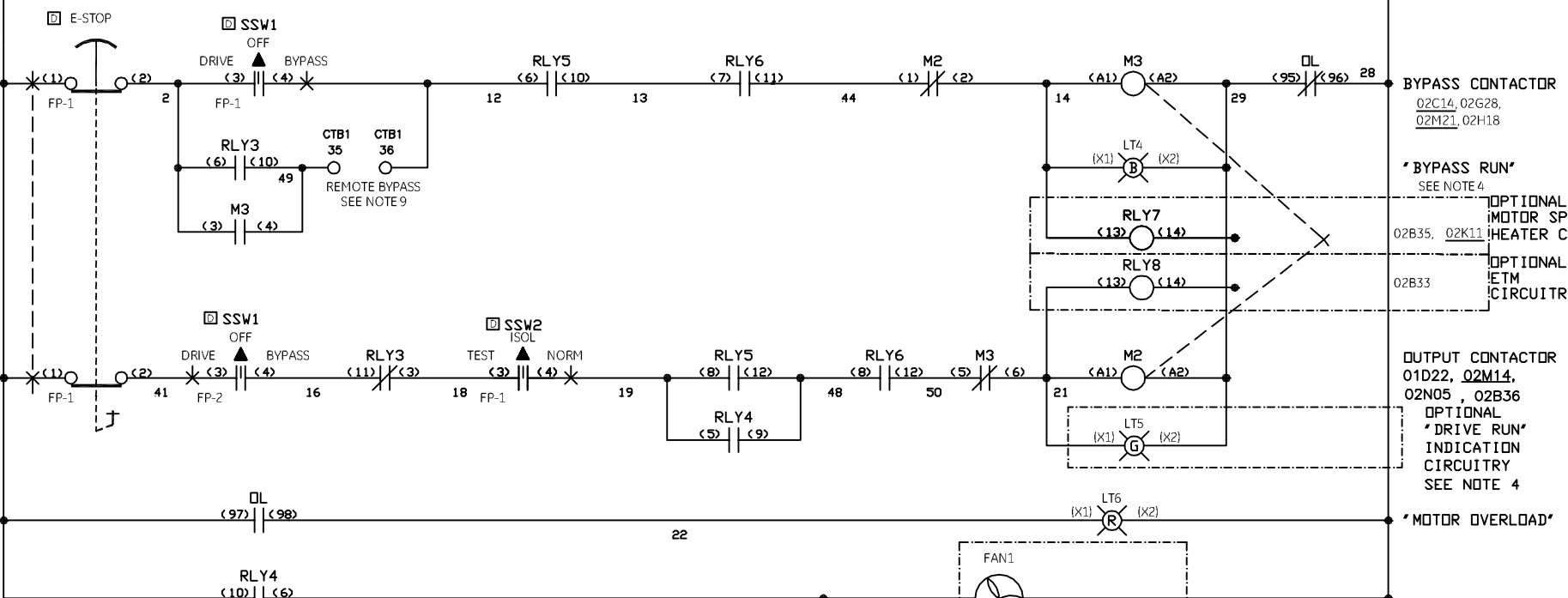
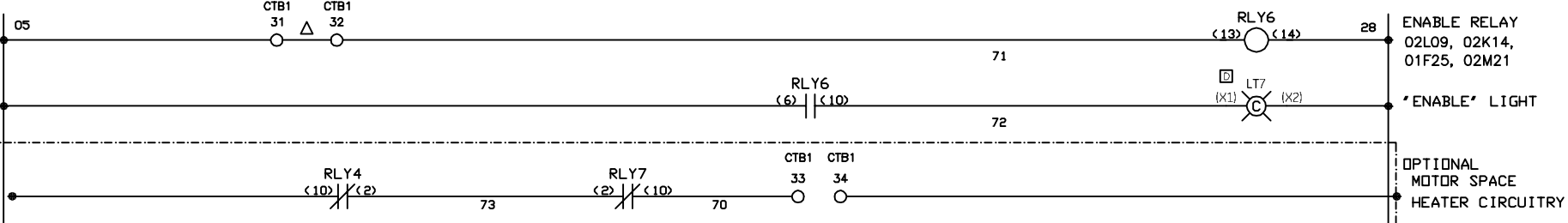
RUN COMMAND RELAY O1F22, O2K14, O2L21, O2D31

OPTIONAL ELAPSED TIME METER CIRCUITRY

OPTIONAL 30SEC TIME DELAY RELAY FOR CAPPANEL

HMR5% INPUT CONTACT CIRCUITRY

CONT'D FROM SHT-2 COLUMN A, ROW 38



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REVISIONS			UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE
REV	DESCRIPTION	DATE	DIMENSIONS ARE IN INCHES TOLERANCES ON: 2 PL DECIMALS ± 3 PL DECIMALS ± ANGLES ± FRACTIONS ±	DRAWN ANANTVJAY	06/04/09
6	AN 11-2005	05/18/11		CHECKED	
				ENGRG	
				ISSUED	10/26/10
			FORMERLY		
AUTOMATION-TOOL-REV			TOL. PER		
BASED ON 55-537804s2 REV 6					

FIRST MADE FOR		AF-650 GP INDUSTRIAL CHANNEL 3 CONT.-BYPASS 2 to 50HP @ 200V, 2 to 300HP @ 460V, 2 to 100HP @ 575V	
SIZE B	DWG NO 55-537804 # 5109NXXXXXXXXXX		
SCALE	SHEET 2 CONT FL		

GE Industrial Systems

ELEMENTARY & CONNECTION DRAWING

ACAD\_DISK\_FILE 55-537804S2