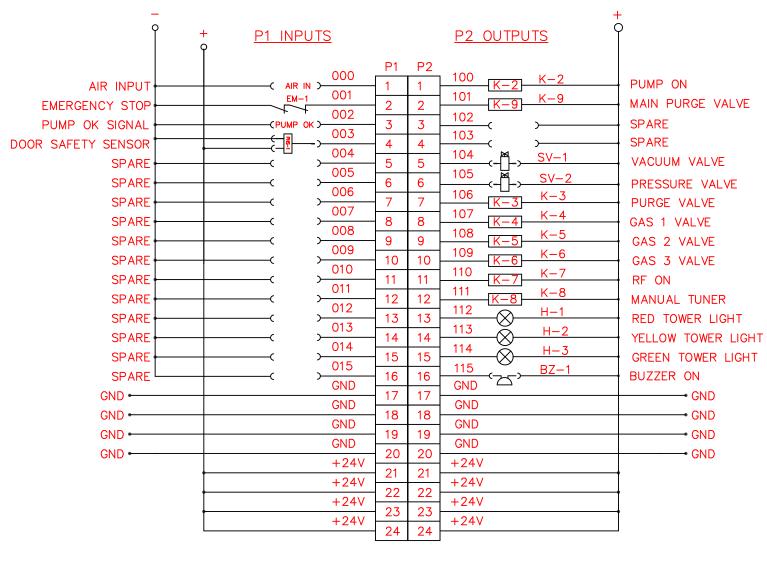


HSL-DI16D016-UD (INPUT/OUTPUT UNIT)



		UTOMATION						
#0	18 Boon Lay Way #08-144 TradeHub 21							
		re 609966						
Tel: +0	35 6465	1886 · Fax:+65 64651887						
Scal	e: C	$\Phi \Box$						
I IN	15	Ψ —						

Engineer	DANNY FOO	Job no.	STANDARD				
Orawn by	_	File Name	TITAN-E2-DI16D	016			
Date	20-06-2012	Material	_	Colour			
INPUT TOUTPUT UNIT							

specified dimensions are in milimeter Gen. Tol.:±0.1mm

ANALOG INPUT/OUTPUT UNIT HSL-AI16A02-M-VV

ANALOG INPUT ANALOG OUTPUT/AGND

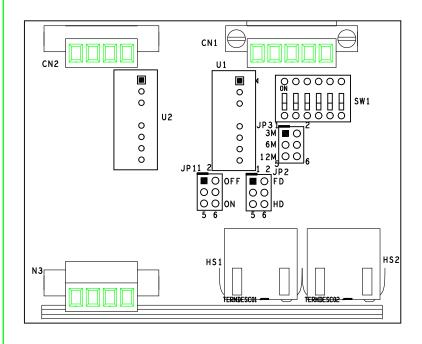
GAS 1 FLOW 201 (+) A1 A1 A17 401 (+) LO GAS 2 FLOW GAS 3 FLOW 203 (+) A3 A19 AGND A20 AGND A20 AGND A21 A21 AGND A22 AGND A22 AGND A23 AGND A23 AGND A24 AGND A25 AGND A25 AGND A25 AGND A26 AGND A26 AGND A27 AGND A27 AGND A28 AGND A28 AGND A29 PRESSURE SENSOR 210 (+) A10 A26 AGND A27 AGND A28 AGND A28 AGND A29 AGND A28 AGND A29 AGND A20 AGND A2	PRESSURE SENSOR	200 (+)	AO	A16	400 (+)	TU
GAS 3 FLOW SPARE 204 (+) A4 FORWARD POWER REVERSE POWER BIAS 207 (+) A7 TUNE POSITION LOAD POSITION GAS 1 PRESSURE SENSOR GAS 2 PRESSURE SENSOR GAS 3 PRESSURE SENSOR CAS 3 PRESSURE SENSOR CAS 4 PRESSURE SENSOR CAS 5 PRESSURE SENSOR CAS 6 PRESSURE SENSOR CAS 7 PRESSURE SENSOR CAS 7 PRESSURE SENSOR CAS 7 PRESSURE SENSOR CAS 8 PRESSURE SENSOR CAS 9 PRESSURE SENSOR CAS 1 PRESSURE SENSOR CAS 1 PRESSURE SENSOR CAS 2 PRESSURE SENSOR CAS 3 PRESSURE SENSOR CAS 3 PRESSURE SENSOR CAS 6 PRESSURE SENSOR CAS 7 PRES	GAS 1 FLOW	201 (+)	A1	A17	401 (+)	LC
SPARE 204 (+) A4 A20 AGND FORWARD POWER 205 (+) A5 A21 AGND REVERSE POWER 206 (+) A6 A22 AGND BIAS 207 (+) A7 A23 AGND TUNE POSITION 208 (+) A8 A24 AGND LOAD POSITION 209 (+) A9 A25 AGND GAS 1 PRESSURE SENSOR 210 (+) A10 A26 AGND GAS 2 PRESSURE SENSOR 211 (+) A11 A27 AGND GAS 3 PRESSURE SENSOR 212 (+) A12 PURGE PRESSURE SENSOR 213 (+) A13 SPARE 214 (+) A14 A30 AGND	GAS 2 FLOW	202 (+)	A2	A18	AGND	
FORWARD POWER REVERSE POWER REVERSE POWER BIAS 206 (+) A6 BIAS 207 (+) A7 A23 AGND A24 AGND A25 AGND A26 AGND A27 AGND A28 AGND A28 AGND A29 AGND A29 AGND A29 AGND A27 AGND A27 AGND A28 AGND A29 AGND A20 AGND A21 AGND A22 AGND A23 AGND A24 AGND A25 AGND A26 AGND A27 AGND A27 AGND A28 AGND A29 AGND A30 AGND	GAS 3 FLOW	203 (+)	A3	A19	AGND	
REVERSE POWER BIAS BIAS TUNE POSITION LOAD POSITION GAS 1 PRESSURE SENSOR GAS 2 PRESSURE SENSOR GAS 3 PRESSURE SENSOR PURGE PRESSURE SENSOR SPARE 206 (+) A6 A22 AGND A23 AGND A24 AGND A25 AGND A26 AGND A26 AGND A27 AGND A27 AGND A28 AGND A28 AGND A29 AGND A29 AGND A29 AGND A29 AGND A30 AGND	SPARE	204 (+)	A4	A20	AGND	
BIAS 207 (+) A7 A23 AGND TUNE POSITION 208 (+) A8 A24 AGND LOAD POSITION 209 (+) A9 A25 AGND GAS 1 PRESSURE SENSOR 210 (+) A10 A26 AGND GAS 2 PRESSURE SENSOR 211 (+) A11 A27 AGND GAS 3 PRESSURE SENSOR 212 (+) A12 A28 AGND PURGE PRESSURE SENSOR 213 (+) A13 A29 AGND SPARE 214 (+) A14 A30 AGND	FORWARD POWER	205 (+)	A5	A21	AGND	
TUNE POSITION LOAD POSITION LOAD POSITION GAS 1 PRESSURE SENSOR GAS 2 PRESSURE SENSOR GAS 3 PRESSURE SENSOR PURGE PRESSURE SENSOR SPARE 208 (+) A8 A24 AGND A25 AGND A26 AGND A27 AGND A27 AGND A28 AGND A28 AGND A29 AGND A30 AGND A30 AGND	REVERSE POWER	206 (+)	A6	A22	AGND	
LOAD POSITION 209 (+) A9 GAS 1 PRESSURE SENSOR 210 (+) A10 GAS 2 PRESSURE SENSOR 211 (+) A11 GAS 3 PRESSURE SENSOR 212 (+) A12 PURGE PRESSURE SENSOR 213 (+) A13 SPARE 214 (+) A14 A25 AGND A26 AGND A27 AGND A28 AGND A29 AGND A30 AGND	BIAS	207 (+)	A7	A23	AGND	
GAS 1 PRESSURE SENSOR 210 (+) A10 GAS 2 PRESSURE SENSOR 211 (+) A11 GAS 3 PRESSURE SENSOR 212 (+) A12 PURGE PRESSURE SENSOR 213 (+) A13 SPARE 214 (+) A14 A26 AGND A27 AGND A28 AGND A29 AGND A30 AGND	TUNE POSITION	208 (+)	8A	A24	AGND	
GAS 2 PRESSURE SENSOR 211 (+) A11 GAS 3 PRESSURE SENSOR 212 (+) A12 PURGE PRESSURE SENSOR 213 (+) A13 SPARE 214 (+) A14 A27 AGND A28 AGND A29 AGND A30 AGND	LOAD POSITION	209 (+)	A9	A25	AGND	
GAS 3 PRESSURE SENSOR 212 (+) A12 PURGE PRESSURE SENSOR 213 (+) A13 SPARE 214 (+) A14 A30 AGND A30 AGND	GAS 1 PRESSURE SENSOR	210 (+)	A10	A26	AGND	
PURGE PRESSURE SENSOR 213 (+) A13 A29 AGND A30 AGND	GAS 2 PRESSURE SENSOR	211 (+)	A11	A27	AGND	
SPARE 214 (+) A14 A30 AGND	GAS 3 PRESSURE SENSOR	212 (+)	A12	A28	AGND	
	PURGE PRESSURE SENSOR	213 (+)	A13	A29	AGND	
SPARE 215 (+) A15 A31 AGND	SPARE	214 (+)	A14	A30	AGND	
· · · · · · · · · · · · · · · · · · ·	SPARE	215 (+)	A15	A31	AGND	

UNE SET OAD SET

SCI AUTOMATION								
18 Boon Lay Way								
#08-14	14 TradeHub 21 ore 609966							
Tel: +65 64651886 · Fax: +65 64651887								
Scale:								
NIS	₩ ,							

	Engineer	DANNY FOO	Job No.	STANDARD		Unless otherwise specified dimension
	Drawn by	_	File Name	TITAN-E2-AI16A02		are in milimeter Gen. Tol.: ±0.1mm
7	Date	20-06-2012	Material	_	Colour	_
	ANA	TITA ALOG INPUT/OUTPU	Remark	cs _		

ANALOG OUTPUT UNIT HSL-A04-U



CN1

E24	24V (+)	+24V
E24	24V (+)	+24V
EG	AGND	AGND
EG	AGND	AGND
FG	E	E

CN2

AO1	300 (V+)
AG	300 (-)
A02	301 (V+)
AG	301 (-)

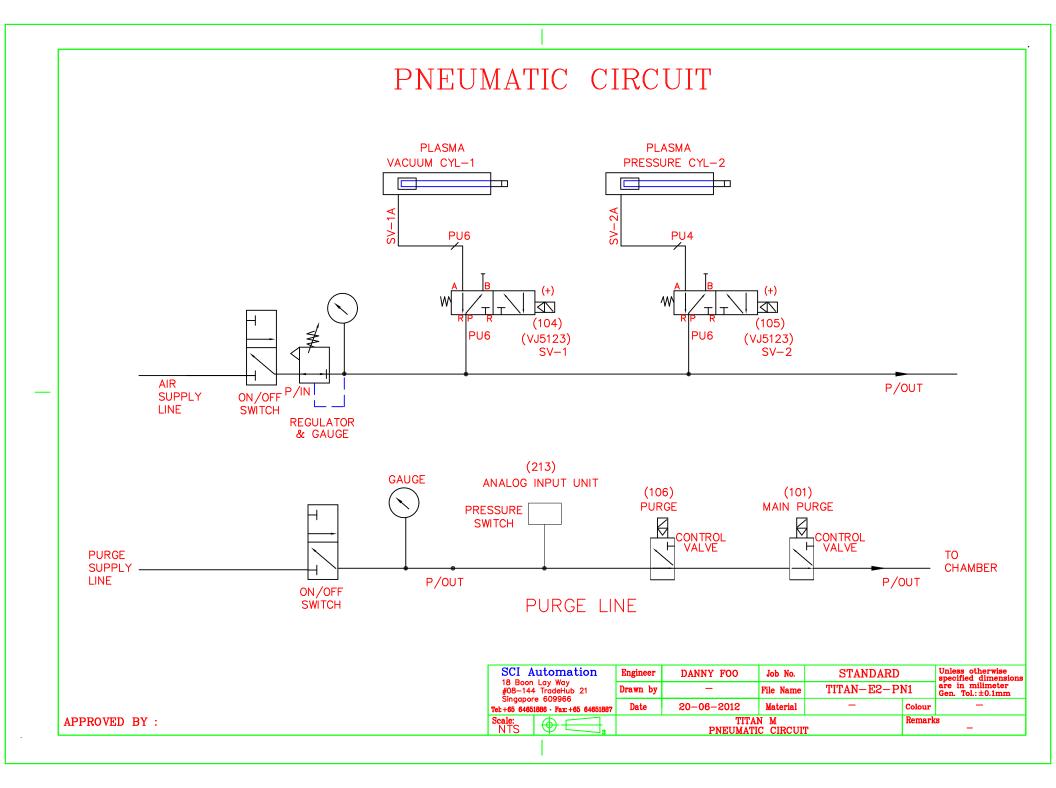
RF SET
SIGNAL COMMON
GAS 1 SET
SIGNAL COMMON

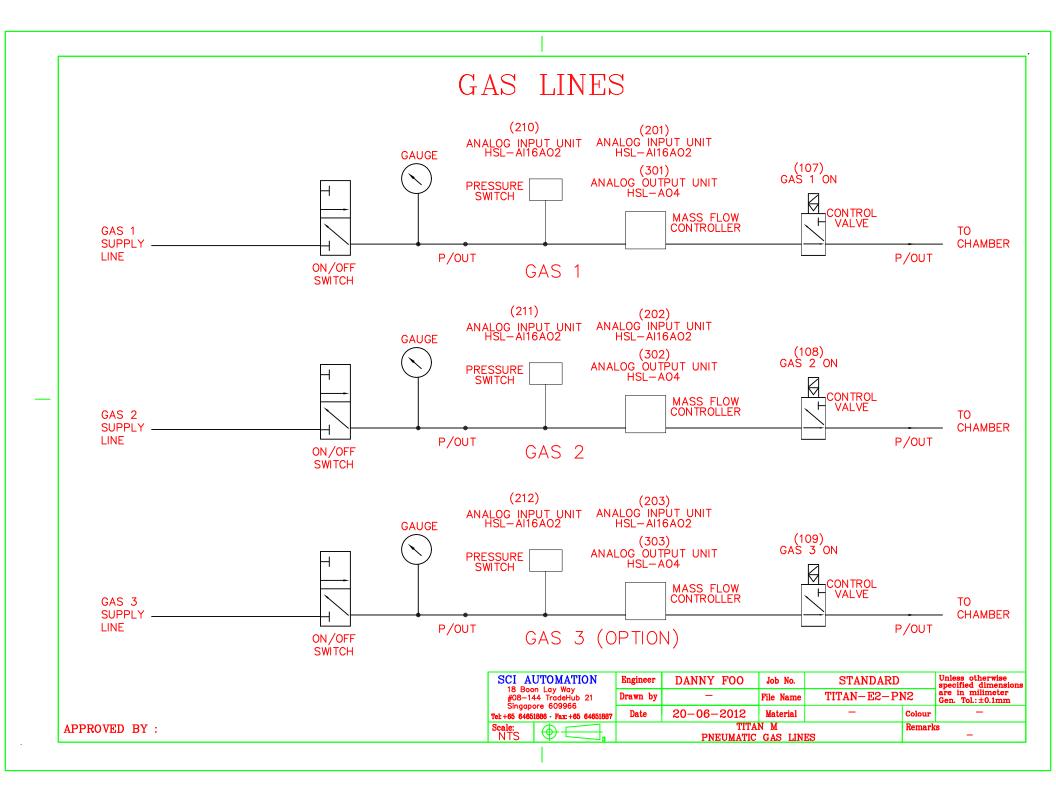
CN3

A02	302 ($(\vee +)$
AG	302 ((-)
A02	303 ($(\vee +)$
AG	303 ((-)

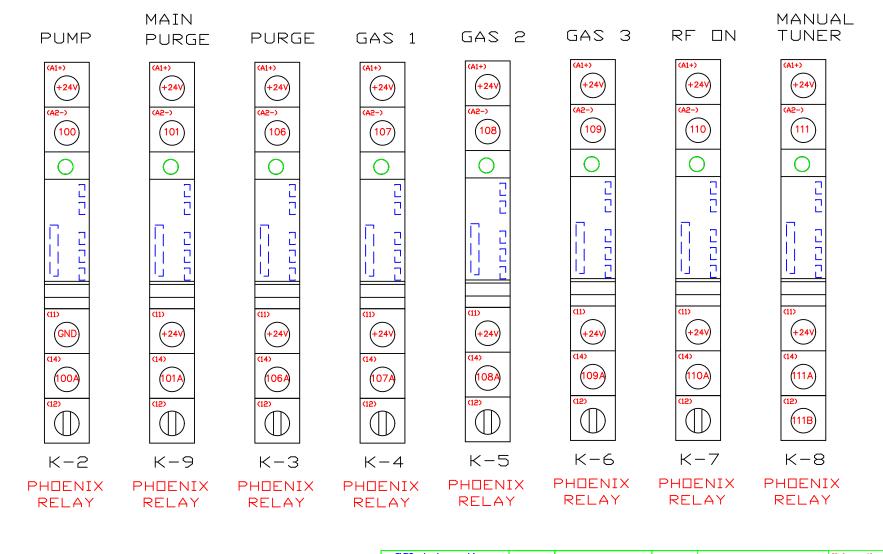
GAS 2 SET
SIGNAL COMMON
GAS 3 SET
SIGNAL COMMON

SCI AUTOMATION	Engineer	DANNY FOO	Job No.			Unless otherwise specified dimensions
18 Boon Lay Way #08-144 TradeHub 21 Singapore 609966	Drawn by	_	File Name	TITAN-E2-A0		are in milimeter Gen. Tol.:±0.1mm
Tel: +65 64651886 · Fax: +65 64651887	Date	20-06-2012	Material	_	Colour	_
Scale: NTS		ANALOG OUTPUT UNITS (4 POINTS)		POINTS)	Remark	



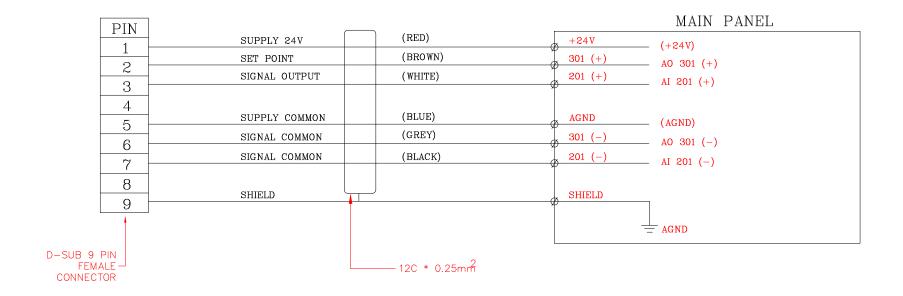


RELAY OUTPUTS



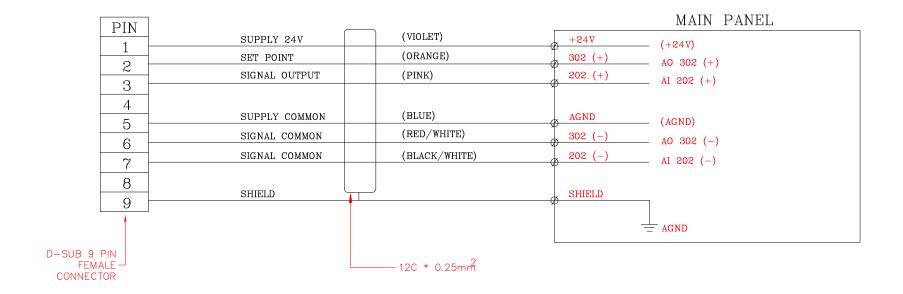
SCI Automation	Engineer	DANNY FOO	Job no.	STANDARD		Unless otherwise specified dimensions
18 Boon Lay Way #08–144 TradeHub 21	Drawn by	_	File Name	TITAN-E2-RO		are in milimeter Gen. Tol.:±0.1mm
Singapore 609966 Tel:+65 64651886 • Fax:+65 64651887	Date	20-06-2012	Material	_	Colour	-
Scale: NTS	TITAN M RELAY OUTPUTS				Remark	

MASS FLOW CONTROLLER 1 P/N: E0000808



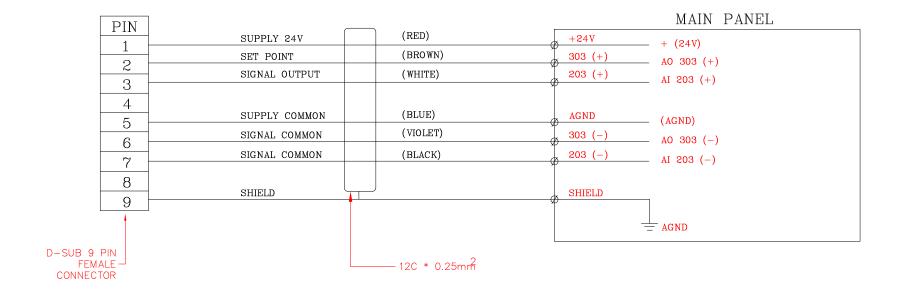
Unless otherwise specified dimensions are in milimeter SCI AUTOMATION Engineer DANNY FOO Job No. STANDARD 18 Boon Lay Way #08-144 TradeHub 21 TITAN-E3-G1 Drawn by File Name 20-06-2012 Date **Material** Colour Remarks MASS FLOW CONTROL GAS 1 CIRCUIT

MASS FLOW CONTROLLER 2 P/N: E0000808



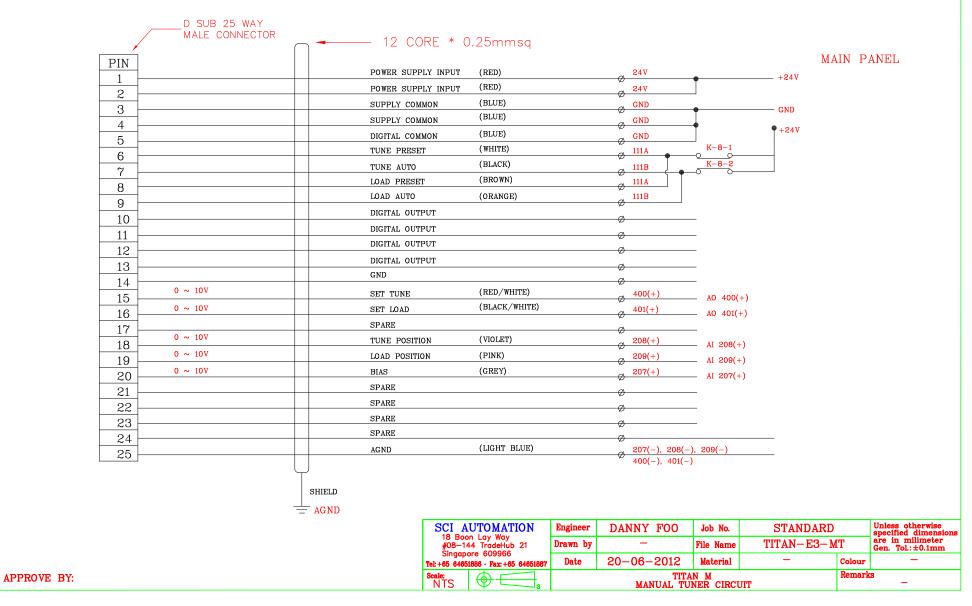
Unless otherwise specified dimensions are in milimeter SCI AUTOMATION Engineer DANNY FOO Job No. STANDARD 18 Boon Lay Way #08-144 TradeHub 21 TITAN-E3-G2 Drawn by File Name 20-06-2012 Date **Material** Colour Remarks MASS FLOW CONTROL GAS 2 CIRCUIT

MASS FLOW CONTROLLER 3 P/N: E0000808

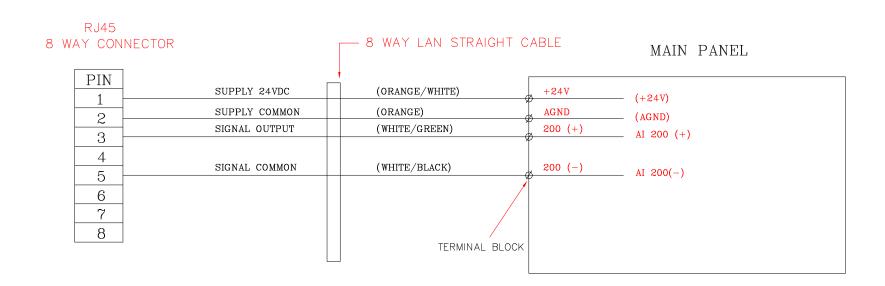


Unless otherwise specified dimensions are in milimeter SCI AUTOMATION Engineer DANNY FOO Job No. STANDARD 18 Boon Lay Way #08-144 TradeHub 21 TITAN-E3-G3 Drawn by File Name 20-06-2012 Date **Material** Colour Remarks MASS FLOW CONTROL GAS 3 CIRCUIT

T1000 TUNER P/N: E0000749

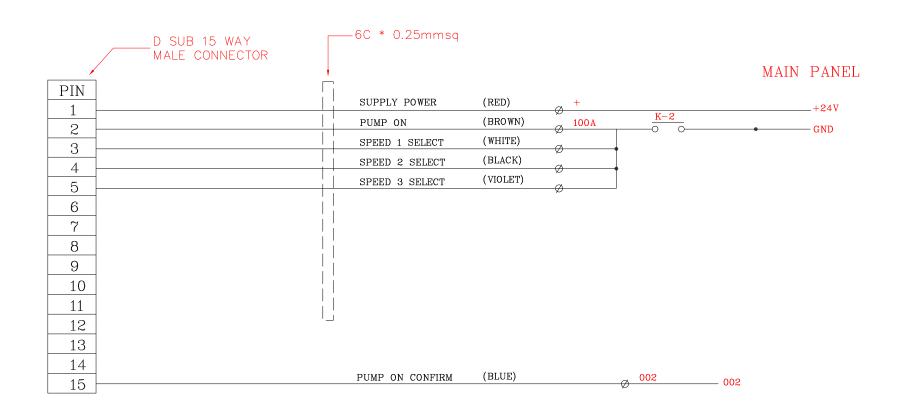


PRESSURE GAUGE P/N: E000767



	SCI AUTOMATION 18 Boon Lay Way #08-144 TradeHub 21 Singapore 609966		Engineer	DANNY FOO	Job No.	STANDARD		Unless otherwise specified dimensions
1			Drawn by	_	File Name	TITAN-E3-P	G	are in milimeter Gen. Tol.: ±0.1mm
ı		1886 • Fax: +65 64651887	Date	20-06-2012	Material	_	Colour	_
	Scale: NTS		TITAN M PRESSURE GAUGE CIRCUIT			Remark	.s _	

VACUUM PUMP P/N: E0000403



 SCI Automation
 18 Boon Loy Way #08-144 TradeHub 21 Singapore 609966 ret+65 64651887 NTS
 Engineer
 DANNY FOO
 Job No.
 STANDARD

 Date
 20-06-2012
 Material
 TITAN-E3-PM

 Rocale: NTS
 TITAN M PUMP CONNECTOR
 Rocale: Rocale: Pump CONNECTOR

Unless otherwise specified dimensions are in milimeter

Colour

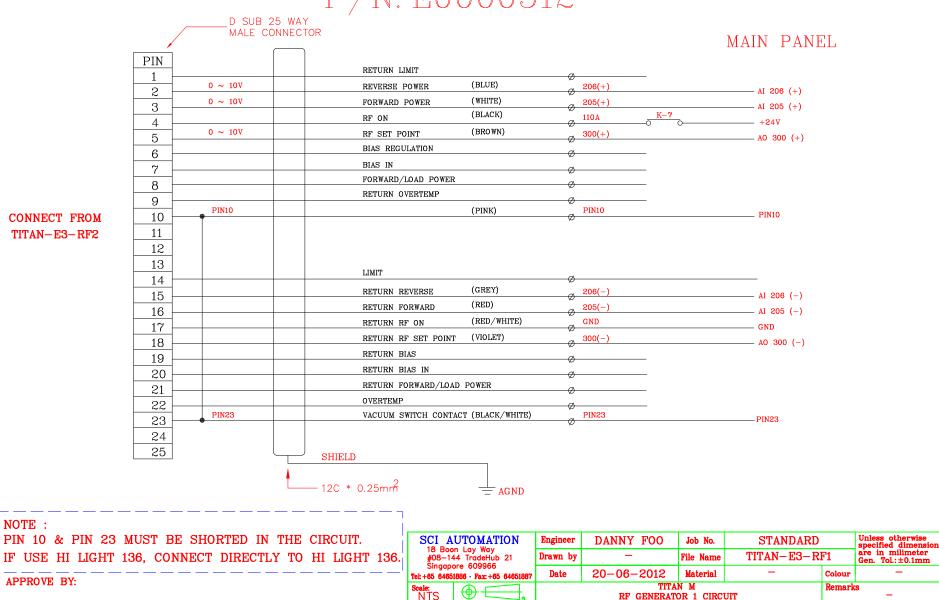
Remarks

RF GENERATOR (HI-LIGHT 136) P/N: E0000512

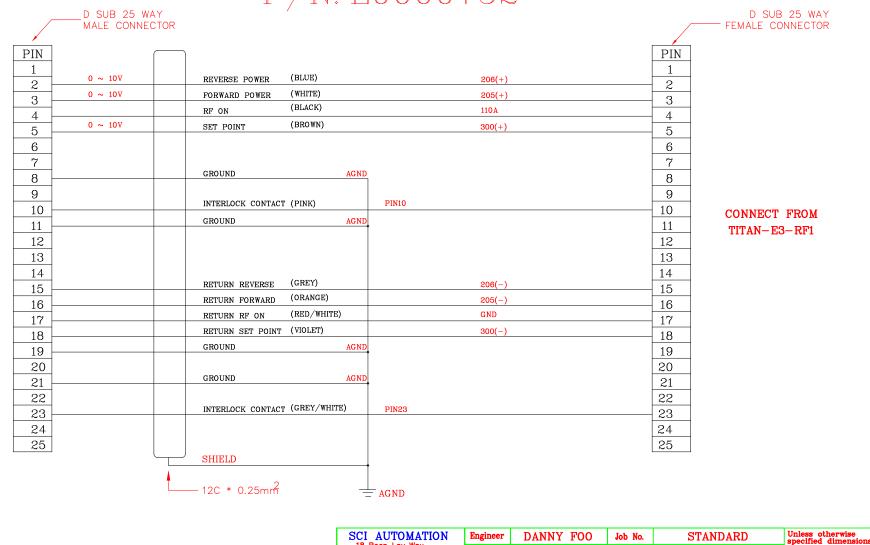
CONNECT FROM

TITAN-E3-RF2

NOTE:



RF GENERATOR (ELITE 600) P/N: E0000752



18 Boon Lay Way #08-144 TradeHub 21

Singapore 609966

Drawn by

File Name

TITAN M RF GENERATOR 2 CIRCUIT

20-06-2012

TITAN-E3-RF2

Colour

Remarks

are in milimeter