


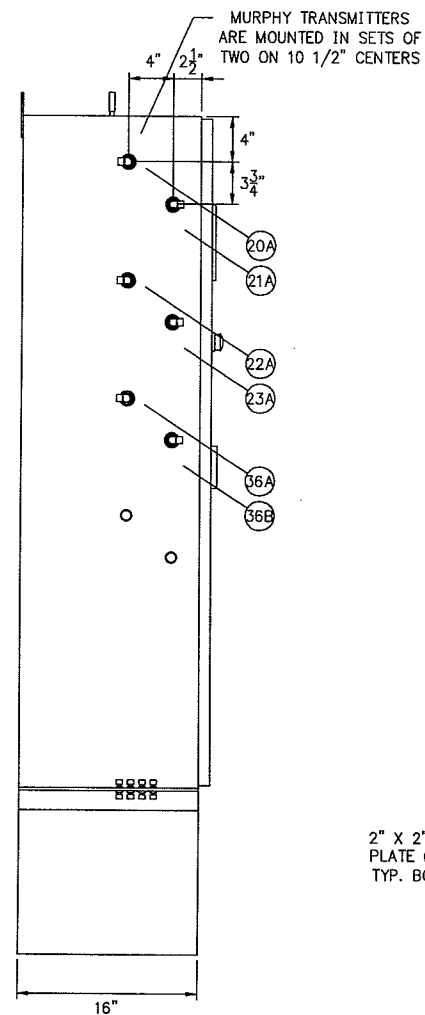
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MAR 08 2006

DRAWING INDEX		
SPARTAN DWG No.	DESCRIPTION	REV.
RM-13322-AA-010-00	DRAWING INDEX	2
RM-13322-AA-100-00	EXTERNAL CABINET AND RACK LAYOUT	2
RM-13322-AA-100-01	INTERNAL CABINET LAYOUT	2
RM-13322-AA-200-00	PNEUMATIC LOGIC AND BILL OF MATERIALS	2
RM-13322-AA-500-00	POWER DISTRIBUTION WIRING	2
RM-13322-AA-500-01	REMVue-500 WIRING DETAILS	2
RM-13322-AA-610-00	DISCRETE INPUT WIRING DIAGRAM	2
RM-13322-AA-610-01	DISCRETE INPUT WIRING DIAGRAM	2
RM-13322-AA-620-00	DISCRETE OUTPUT WIRING DIAGRAM	2
RM-13322-AA-630-00	ANALOG INPUT WIRING DIAGRAM	2
RM-13322-AA-640-00	ANALOG OUTPUT WIRING DIAGRAM	2
RM-13322-AA-650-00	THERMOCOUPLE INPUT WIRING DIAGRAM	2
RM-13322-AA-650-01	THERMOCOUPLE INPUT WIRING DIAGRAM	2
RM-13322-AA-650-02	THERMOCOUPLE INPUT WIRING DIAGRAM	2

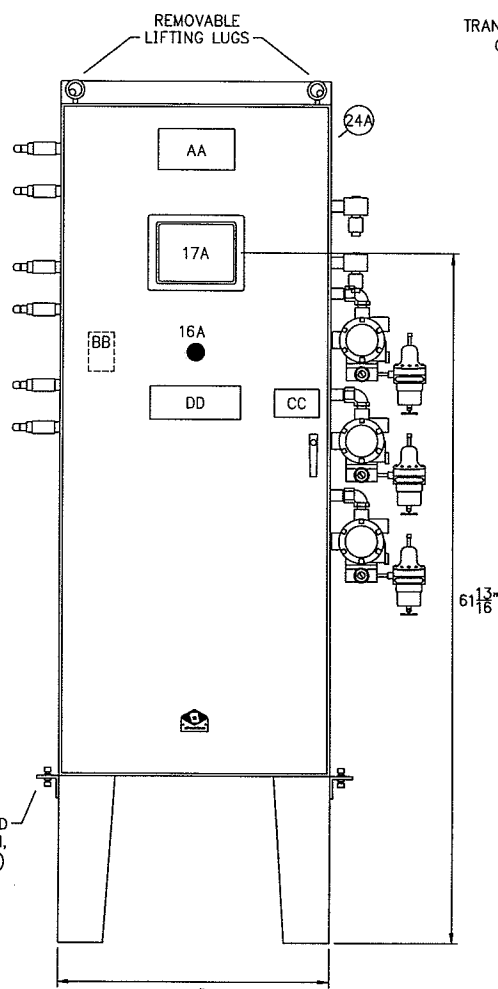
RM13322AA01000.DWG - 02 MAR 06 10:14am

DRAWING No.	REFERENCE DRAWINGS	REV.	DESCRIPTION	DATE	DRAWN	CHK	DESIGN	APP
		2	FIELD CHANGES (BY ADF)	02 MAR 06	JQY	BWK	BWK	BWK
		1	FIELD CHANGES (BY ADF)	27 FEB 06	AW	BWK	BWK	BWK
		0	SPARTAN AS BUILT	18 AGU 05	JQY	BWK	BWK	BWK
		A	ISSUED FOR APPROVAL	12 JUL 05	JQY	BWK	BWK	BWK

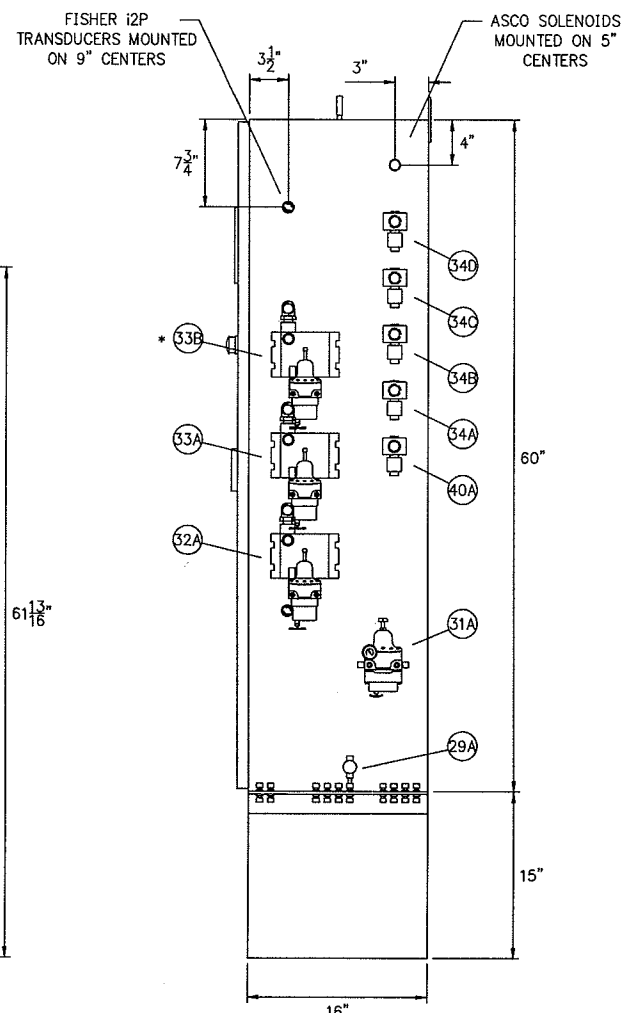
 SPARTAN CONTROLS		ONSTREAM MOBILE GAS SERVICES	
		TRAILER UNIT COMPRESSOR UNIT CONTROL PANEL (REMVue-500/S) DRAWING INDEX REF. #703	
LSD:		P.O.#253168	
PROJECT No. PN13322	SCALE: NTS	DRAWING No. RM-13322-AA-010-00	REV. 2



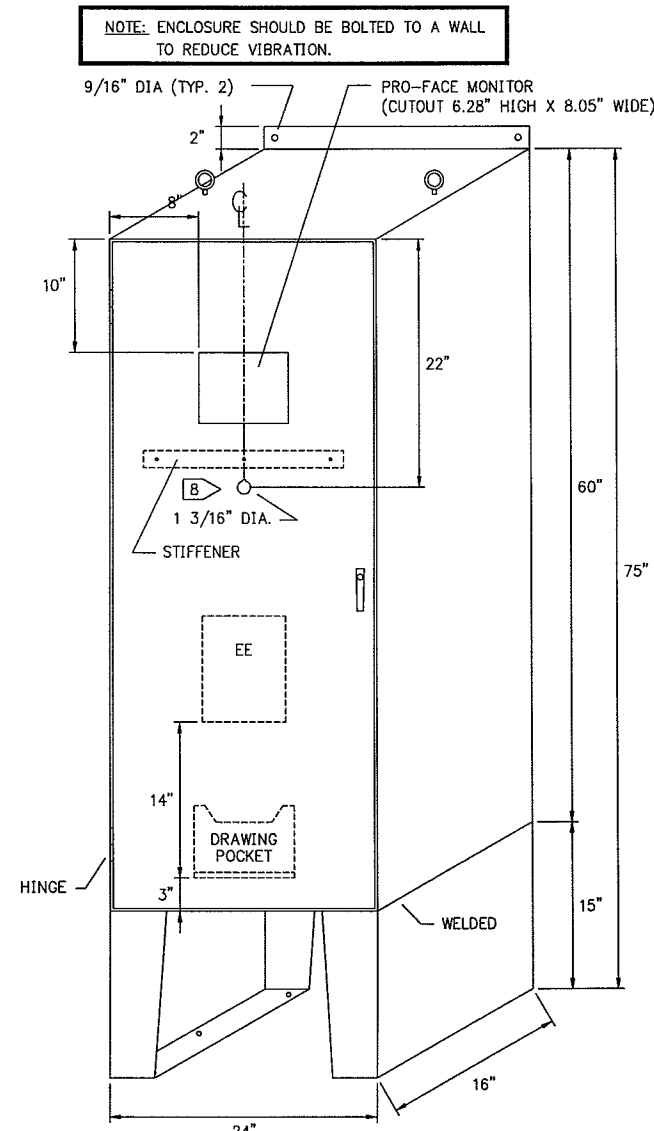
LEFT SIDE VIEW



FRONT VIEW



RIGHT SIDE VIEW



CABINET CUTOUT DETAILS

ITEM	LAMACOID TAG	SIZE	COLOUR
AA	REMVue-500	3.625x6.75	-
EE	GROUNDING INSTRUCTIONS	9.5x7.5	WHITE
16A	USD	1x3	RED

LAMACOID TAG 'CC'
(LAMACOID SIZE: 2.5x4, COLOUR: RED)

WARNING
MORE THAN ONE LIVE
CIRCUIT (see wiring diagram)
DISCONNECT POWER
BEFORE SERVICING
AUTHORIZED
PERSONNEL ONLY

LAMACOID TAG 'BB'-LOCATED ON BACK OF DOOR
(LAMACOID SIZE: 2.25x3.5, COLOUR: WHITE)

WARNING
ALL EQUIPMENT INSTALLED
IN THIS PANEL MUST
BE SUITABLE FOR USE IN A
CLASS 1, DIVISION 2 LOCATION.
USE OF CERAMIC OR SAND FILLED
FUSES IS RECOMMENDED.
ENSURE THERE IS NO GAS
PRESENT AND POWER HAS BEEN
REMOVED BEFORE OPERATING
DISCONNECT TERMINALS, TEST
JUMPERS AND/OR REMOVING FUSES.

LAMACOID TAG 'DD'

UNIT #703
ENGINE : WAUKESHA L5790G
COMPRESSOR : WORTHINGTON 4 CYLINDER
MANUFACTURED BY:
ONSTREAM MOBILE GAS SERVICES

DRIVER: WAUKESHA L5790G
COMPRESSOR: WORTHINGTON 4 CYLINDER

NOTES:

- CABINET TO BE 60" H X 24" W X 16" D C/W SINGLE FRONT ACCESS DOOR, 3 POINT HANDLE AND 15" HIGH LEGS (EACH LEG HAS THREE, 1/2" DIA. MOUNTING HOLES).
- PAINT COLOUR: SPARTAN CONTROLS BLUE.
- ENCLOSURE RATING : NEMA 12.
- CIRCUIT TUBING TO BE 1/4" 304SS. PROCESS TUBING TO BE 1/4" 316SS. CIRCUIT FITTINGS TO BE 1/4" SWAGELOK CADMIUM PLATED STEEL. PROCESS FITTINGS TO BE 1/4" SWAGELOK 316SS. ALL STAINLESS STEEL LINES TO HAVE 316SS FERRULES.
- SYSTEM VENTED TO TWO 3/8" BULKHEAD CONNECTIONS.
- ALL DISCRETE END DEVICES TO BE SUITABLE FOR CLASS 1, DIV 2 APPLICATION WITH 24VDC POWER.
- ALL WIRING FOR TRANSMITTERS, SOLENOIDS & I/P TRANSDUCES PENETRATING THROUGH ENCLOSURE TO BE RUN IN CLASS 1, DIV. 2 CONNECTORS.
- ALL ALLEN-BRADLEY PUSHBUTTONS TO HAVE KEYED CUTOUT.
- ELECTRICAL AREA CLASSIFICATION: CSA CLASS 1, DIV. 2, GROUPS C&D, TEMP CODE T2D.

* INDICATES NOT INCLUDED

RM13322AA10000.DWG - 02 MAR 06 10:14am

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A	ISSUED FOR APPROVAL	12 JUL 05	JQY	BWK	BWK	BWK

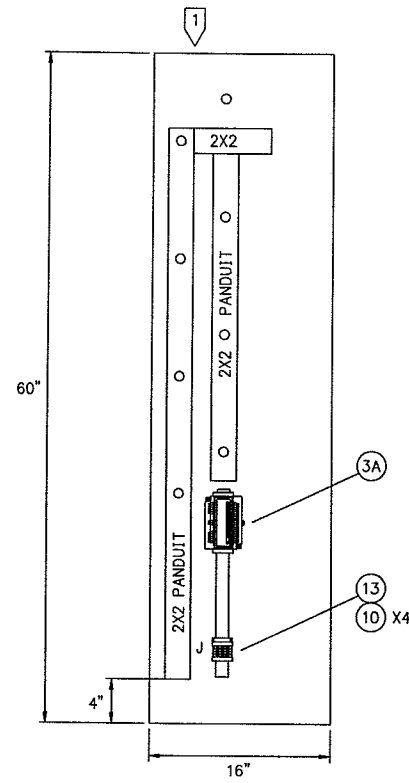


SPARTAN CONTROLS

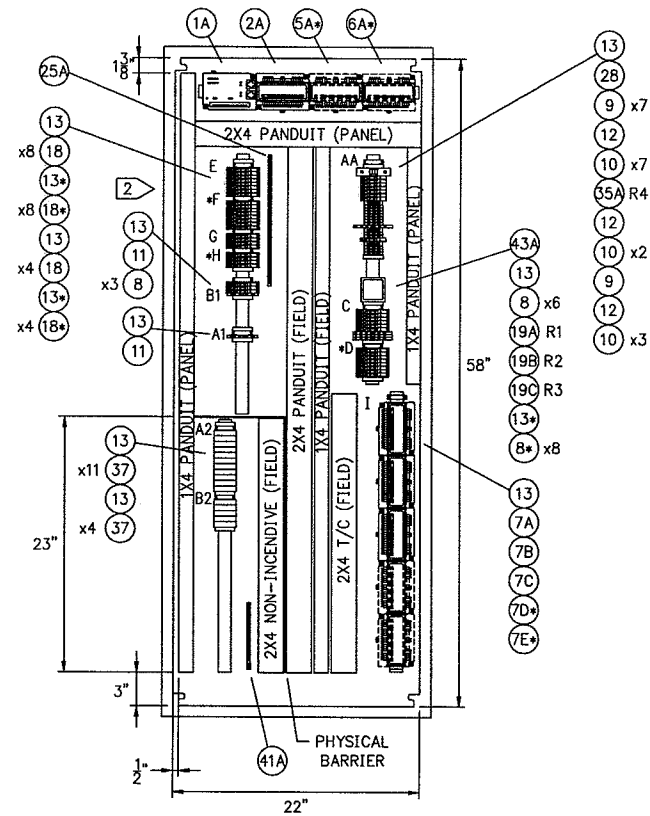
ONSTREAM MOBILE GAS SERVICES

TRAILER UNIT
COMPRESSOR UNIT CONTROL PANEL (REMVue-500/S)
EXTERNAL CABINET AND RACK LAYOUT

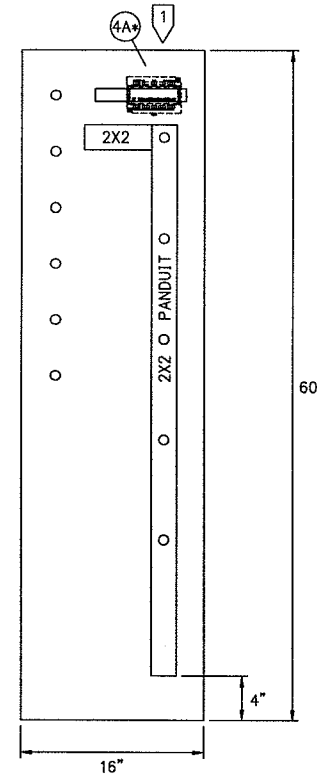
LSD: REF. #703 P.O.#253168
PROJECT No. PN13322 SCALE: NTS DRAWING No. RM-13322-AA-100-00 REV. 2



INTERNAL LAYOUT-LEFT SIDE



INTERNAL LAYOUT-REAR



INTERNAL LAYOUT-RIGHT SIDE

ITEM	TERMINAL STRIP IDENTIFIER
AA	DC POWER DISTRIBUTION
A1	TS 1 (D.I. TERMINALS) ALL FUSES 50 mA
A2	TS 1 (D.I. BARRIERS)
B1	TS 2 (D.I. TERMINALS) ALL FUSES 50 mA
B2	TS 2 (D.I. BARRIERS)
C	TS 3 (D.O. TERMINALS) ALL FUSES 1A
* D	TS 4 (D.O. TERMINALS) ALL FUSES 1A
* E	TS 5 (A.I. TERMINALS) ALL FUSES 50 mA
* F	TS 6 (A.I. TERMINALS) ALL FUSES 50 mA
* G	TS 7 (A.O. TERMINALS) ALL FUSES 50 mA
* H	TS 8 (A.O. TERMINALS) ALL FUSES 50 mA
I	THERMOCOUPLES
J	COMM.'S (COMMUNICATION TERMINALS)

NOTES:

- 1 DIN RAIL AND/OR PANDUIT MOUNTED TO SIDE OF ENCLOSURE WITH STUDS
- 2 DIN RAIL TO BE ISOLATED FROM SUBPLATE AND GROUNDED TO THE GROUND BUS BAR.

* INDICATES NOT INCLUDED

RM13322AA10001.DWG - 02 MAR 06 10 14am

REV.	DESCRIPTION	DATE	DRAWN	CHK	DESIGN	APP
2	FIELD CHANGES (BY ADF)	02 MAR 06	JQY	BWK	BWK	BWK
1	FIELD CHANGES (BY ADF)	27 FEB 06	AW	BWK	BWK	BWK
0	SPARTAN AS BUILT	18 AGU 05	JQY	BWK	BWK	BWK
A	ISSUED FOR APPROVAL	12 JUL 05	JQY	BWK	BWK	BWK

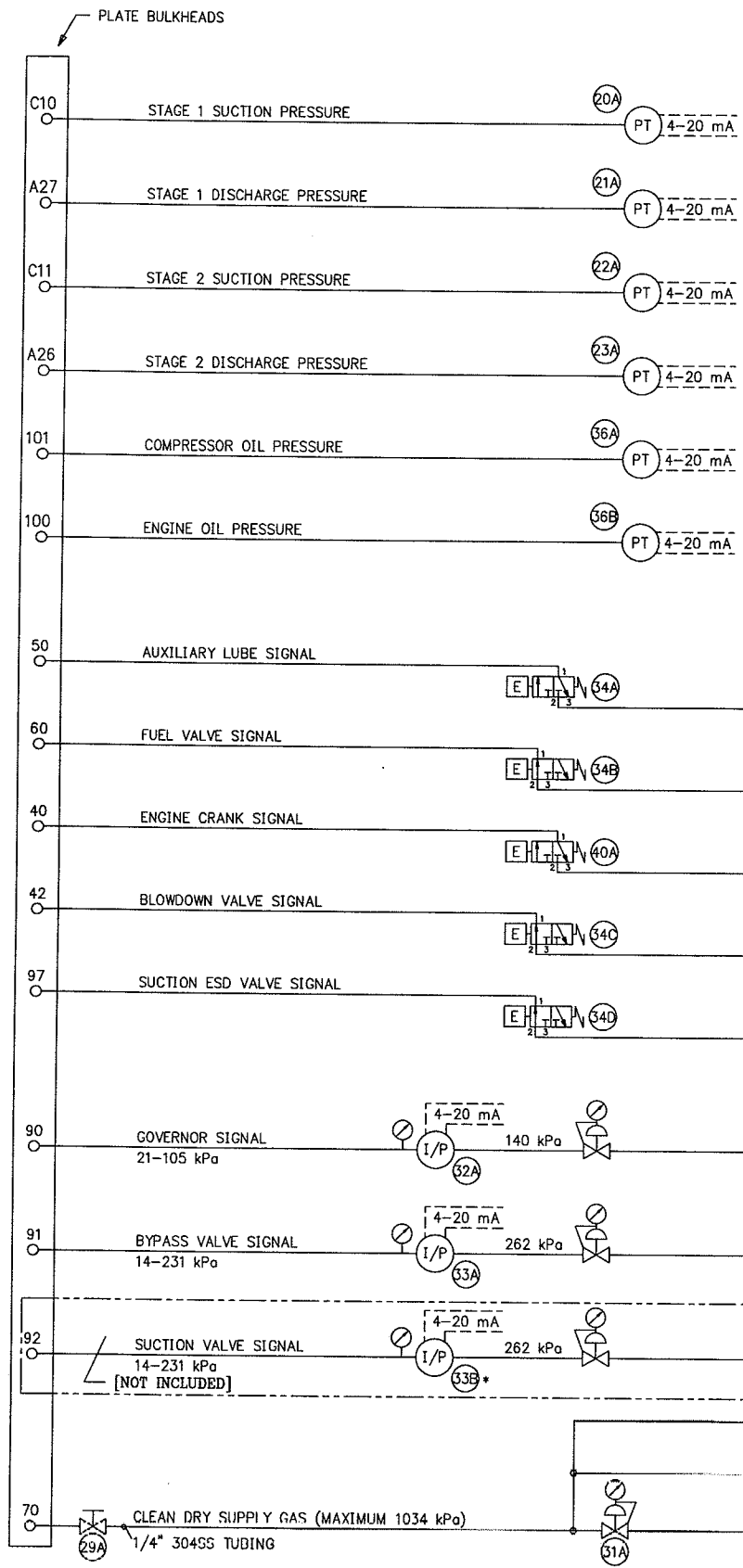


SPARTAN CONTROLS

ONSTREAM MOBILE GAS SERVICES

TRAILER UNIT
COMPRESSOR UNIT CONTROL PANEL (REMVue-500/S)
INTERNAL CABINET LAYOUT

LSD:	SCALE: NTS	DRAWING No. RM-13322-AA-100-01	P.O.#253168
PROJECT No. PN13322	SCALE: NTS	DRAWING No. RM-13322-AA-100-01	REV. 2




BILL OF MATERIALS				
ITEM	QTY. INCL.	PART NUMBER	DESCRIPTION	INSTRUCTIONS
44	1	10-080-678	GENERATOR/24VDC/60 AMP	SHIPPED LOOSE
45	1	10-080-678/MB9	MOUNTING BRACKET 9.5" UNIVERSAL	SHIPPED LOOSE
46	1	H014	HUB 7/8" (Hx7/8)	SHIPPED LOOSE
47	6	77606103	LINK BELT "B" TYPE 21/32", 6 FEET	SHIPPED LOOSE
48	1	BB2-A-UVG0-CB	BATTERY DIV 2 C/W UNDERVOLTAGE+GAS DETECTION	SHIPPED LOOSE
49	1	BB2-BATT/ENCL	BATTERY HOUSING	SHIPPED LOOSE
50	1	BK47H	SHEAVE 4.20" B-DATUM SINGLE GROOVE	SHIPPED LOOSE

BILL OF MATERIALS					
ITEM	STD. QTY.	QTY. INCL.	PART NUMBER	DESCRIPTION	INSTRUCTIONS
1A	1	1	10-7582	REMVue-500 IPM, 16MB, 3RS232, RS485, ETHERNET	-
2A	1	1	10-7594	REMVue-500 COMBINATION I/O MODULE/12 DI/8 DO/8 AI/4 AO	-
3A	1	1	10-7504	REMVue-500 DISCRETE INPUT MODULE/8PT/COUNTER	-
4A	1	0	10-7506	REMVue-500 DISCRETE OUTPUT MODULE/8PT	-
5A	1	0	10-7514	REMVue-500 ANALOG INPUT MODULE/8PT	-
6A	1	0	10-7520	REMVue-500 ANALOG OUTPUT MODULE/4PT	-
7A-E	5	3	10-7512	REMVue-500 ANALOG UNIVERSAL MODULE/8PT/TC	-
8	11	9	95033.5	WEIDMULLER FUSED TERMINAL BLOCK/KDKS1 EN	-
	5	3	GDA 50MA	BUSS 50mA CERAMIC FUSE	-
	6	6	GDA 1A	BUSS 1 AMP CERAMIC FUSE	-
9	8	8	2227.6	WEIDMULLER FUSED TERMINAL BLOCK/ASK1 LD	-
	2	2	GDA 1/4A	BUSS 1/4 AMP CERAMIC FUSE	-
	2	2	GDA 500MA	BUSS 1/2 AMP CERAMIC FUSE	-
	1	1	GDA 1.6A	BUSS 1.6 AMP CERAMIC FUSE	-
	1	1	GDA 2A	BUSS 2 AMP CERAMIC FUSE	-
	2	2	GDA 5A	BUSS 5 AMP CERAMIC FUSE	-
10	16	16	4674.6	WEIDMULLER TERMINAL BLOCK/SAK4 EN	-
11	2	2	10215.0	WEIDMULLER DUAL STACK TERMINAL BLOCK/WDK2.5	-
12	3	3	4437.6	WEIDMULLER TERMINAL BLOCK/SAK10/TS35	-
13	11	8	16319.3	WEIDMULLER CARRIER TAG SHT55	-
14A	1	1	-	CABLE REMVue-500/RS485	-
15A	1	1	REM500/IPM	CABLE REMVue-500/GRAPHIC LOGIC CONTROLLER	-
16A	1	1	800T-FX602P	ALLEN-BRADLEY P.B./MUSH/MAINT/RED/HS/1NC	-
	1	1	800T-N310	ALLEN-BRADLEY PROTECTIVE GUARD	-
17A	1	1	GLC2400-TC41-24V	PRO-FACE CONTROLLER/7.4" TFT COLOUR LCD/24VDC	-
18	12	12	9528110000	WEIDMULLER FUSED TERMINAL BLOCK WITH GND/KDKS1/PE	-
	12	12	GDA 50MA	BUSS 50mA CERAMIC FUSE	-
19A-C	3	3	80.010.4000.0	WIELAND TERMINAL BLOCK RELAY/24VDC/6AMP	-
20A	1	1	PXT-1000	MURPHY PRESSURE TRANSMITTER/316SS/0-6895 kPa	-
21A	1	1	PXT-1000	MURPHY PRESSURE TRANSMITTER/316SS/0-6895 kPa	-
22A	1	1	PXT-1000	MURPHY PRESSURE TRANSMITTER/316SS/0-6895 kPa	-
23A	1	1	PXT-2000	MURPHY PRESSURE TRANSMITTER/316SS/0-13790 kPa	-
24A	1	1	5412ES602416BL	EUROBEX ENCLOSURE/NEMA 4/PAINTED BLUE	-
	1	1	0000094	SPARTAN LOGO	-
25A	1	1	N-8020	12" LONG ILSCO BAR	-
	3	3	GL 2165-1A	1" GLASTIC INSULATOR	-
26	6	6	1N4007	DIODE	-
27A	1	1	0002736	FUSE KIT REMVue-500	-
28	1	1	USM1	FERRAZ SHAWMUT FUSED TERMINAL BLOCK/TS35	-
	1	1	KTK 15A	BUSS KTK 15A FUSE	-
29A	1	1	S-1VS4	WHITEY 1/4" ISOLATION VALVE/CARBON STEEL	BY MFG.
30A	-	-	-	-	-
31A	1	1	67CFR-601	FISHER REGULATOR/245-875 kPa	-
	1	1	11B8579X042	FISHER 2" GAUGE/0-1100 kPa	-
32A	1	1	I2P-X18	FISHER I/P TRANSDUCER/21-105 kPa	-
	1	1	E1403	WINTER 2" DRY GAUGE/0-210 kPa	-
	1	1	67CFR-362/SPEC	FISHER REGULATOR/35-245 kPa/VENTED BONNET	-
	1	1	E1403	WINTER 2" DRY GAUGE/0-210 kPa	-
	1	1	MF90-1	KILLARK 1/2" CONDUIT ELBOW	-
	1	1	1/2" X CLOSE RGS	1/2" X CLOSE RGS RIDGED NIPPLE	BY MFG.
33A-B	2	1	I2P-X28X	FISHER I/P TRANSDUCER/14-231 kPa	-
	1	1	E1405	WINTER 2" DRY GAUGE/0-420 kPa	-
	1	1	67CFR-600/SPEC	FISHER REGULATOR/0-420 kPa/VENTED BONNET	-
	1	1	E1405	WINTER 2" DRY GAUGE/0-420 kPa	-
	2	1	MF90-1	KILLARK 1/2" CONDUIT ELBOW	-
	2	1	1/2" X CLOSE RGS	1/2" X CLOSE RGS RIDGED NIPPLE	BY MFG.
34A-D	3	4	EF8320G202-24	ASCO SOLENOID VALVE/24VDC	-
35A	1	1	80.010.4005.0	WIELAND TERMINAL BLOCK RELAY/24VDC/20 MA	-
36A-B	2	2	PXT-200	MURPHY PRESSURE TRANSMITTER/316SS/0-1379 kPa	-
37	0	15	WT-57.867.0000.0010	WIELAND NON-INCENDIVE BARRIER	BY CUSTOMER
38	-	-	-	-	-
39A-B	1	2	21.311.1253.0	WIELAND 6 EDS TERMINAL STRIP/12 POLE	-
40A	1	1	EF8320G231-24	ASCO SOLENOID VALVE/24VDC	-
41A	1	1	0000083	6" LONG ILSCO BAR	-
	1	1	GROUND LUG MEDIUM	GROUND LUG 2/0-14 GA.	-
	2	2	GL 2165-1A	1" GLASTIC INSULATOR	-
42A	1	1	1/2 WATT 1K3	1300 OHM RESISTOR	-
43A	1	1	7914760001	WEIDMULLER FUSE CONTAINER/DIN RAIL MOUNT	-

RM13322AA20000.DWG - 02 MAR 06 10:14am

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		A	ISSUED FOR APPROVAL	12 JUL 05	JQY	BWK	BWK	BWK



SPARTAN CONTROLS

ONSTREAM MOBILE GAS SERVICES

TRAILER UNIT

COMPRESSOR UNIT CONTROL PANEL (REMVue-500/S)

PNEUMATIC LOGIC AND BILL OF MATERIALS

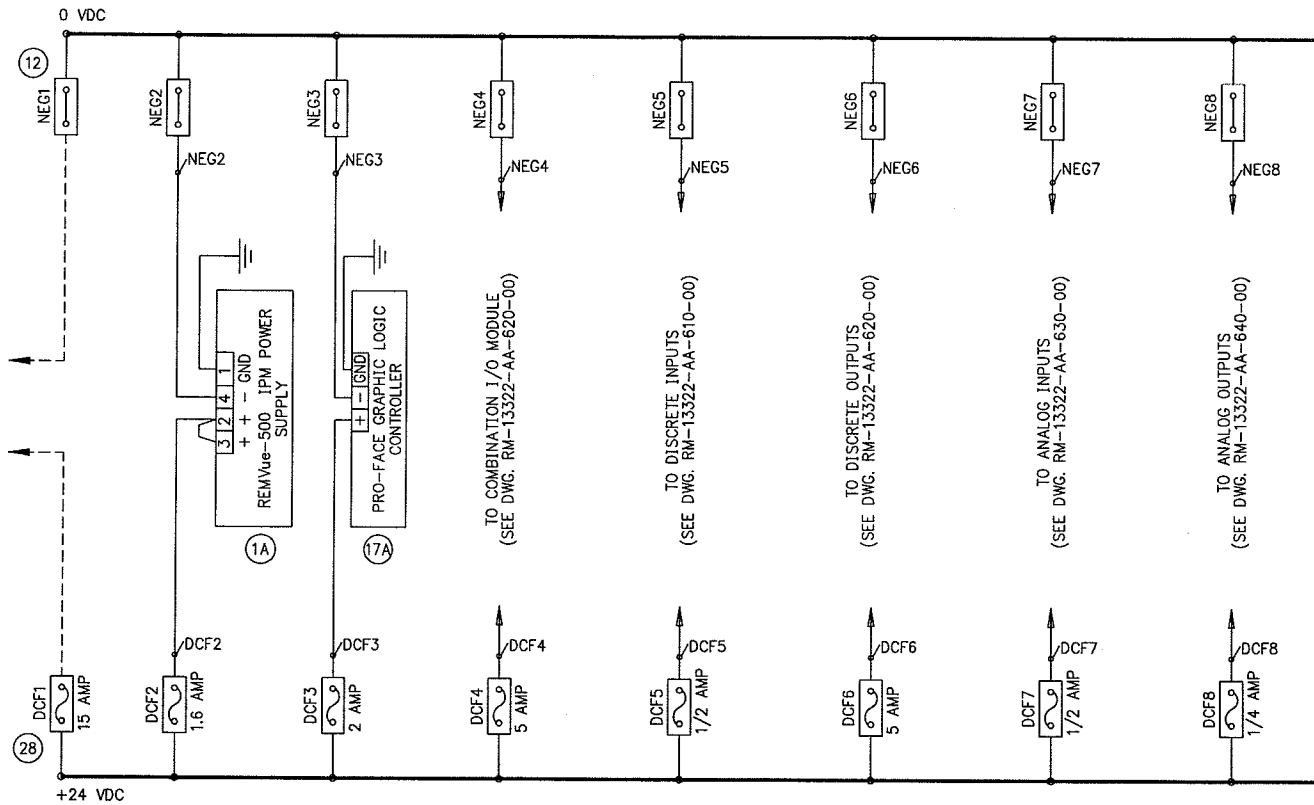
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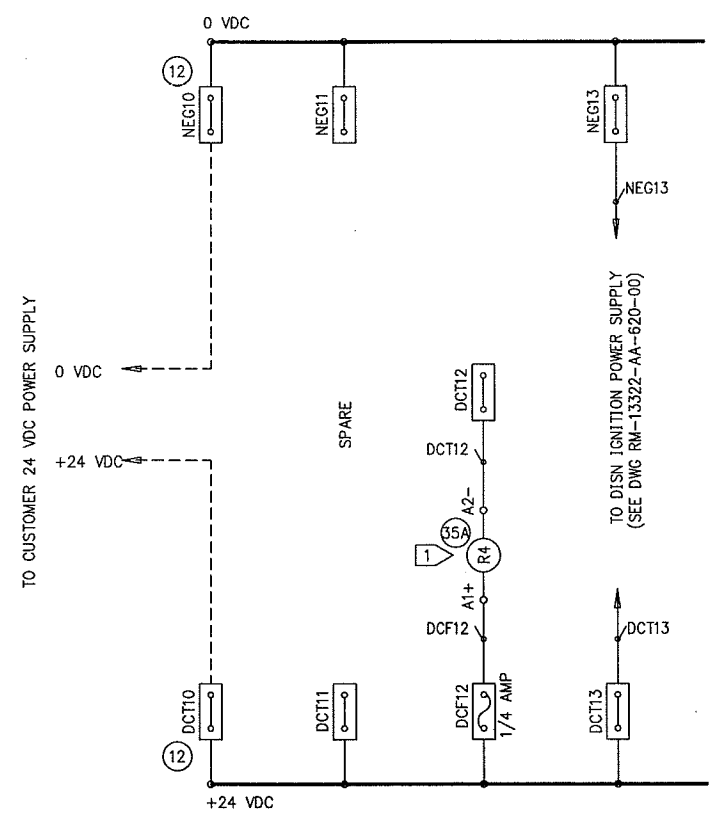
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DC POWER DISTRIBUTION

NOTE: RECOMMEND USE OF 24V LOW VOLTAGE DISCONNECT TO REDUCE POSSIBILITY OF BROWN-OUTS AND DATA CORRUPTION.



NOTE: A SEPARATE 24VDC FEED SHOULD BE USED FOR DISN IGNITION, TO PREVENT CURRENT SURGES THROUGH PANEL ELECTRONICS.



WIRE COLOUR CODE	
GROUND	GREEN
+24 VDC	RED
24 VDC SWITCHED	ORANGE
0 VDC	BLUE
0 VDC SWITCHED	MEDIUM BLUE

WIRE LEGEND	
PANEL WIRE	—————
FIELD WIRE	- - - - -

NOTES:
 1 FOR RELAY CONTACTS R4-1 SEE DWG. RM-13322-AA-610-01.

- LEGEND:
- WEIDMULLER ASK1 EN FUSED TERMINAL BLOCK
 - WEIDMULLER SAK4 FN FFD-THROUGH TERMINAL BLOCK (UNLESS NOTED OTHERWISE)

RM13322AA50000.DWG - 02 MAR 05 10:14:30M

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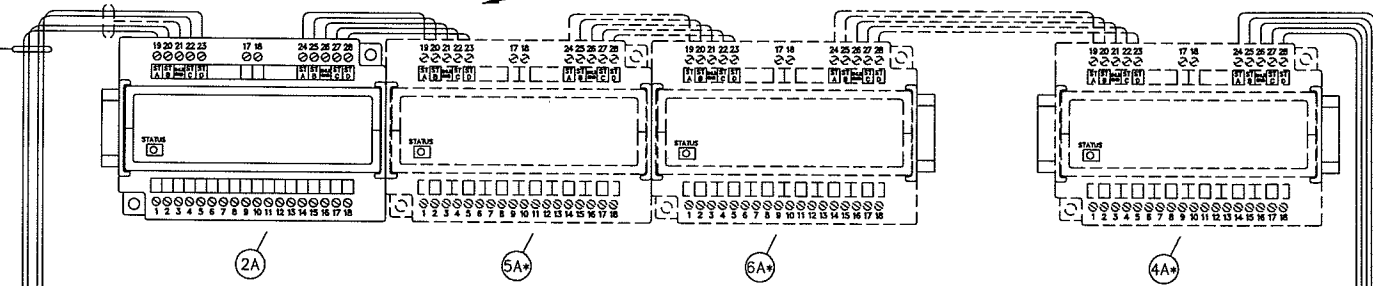
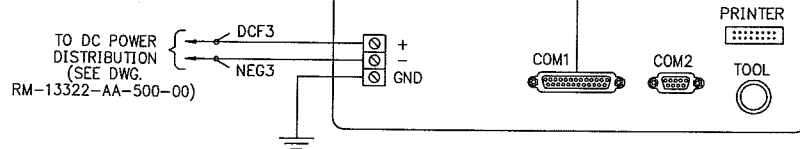
SPARTAN CONTROLS
 ONSTREAM MOBILE GAS SERVICES
 TRAILER UNIT
 COMPRESSOR UNIT CONTROL PANEL (REMVue-500/S)
 POWER DISTRIBUTION WIRING
 REF. #703 P.O.#253168
 PROJECT No. PN13322 SCALE: NTS DRAWING No. RM-13322-AA-500-00 REV. 2

IF ITEMS 5A,6A,4A ARE NOT INCLUDED TERMINATE CABLE AT ITEM 7A (TERMINALS 19-23)

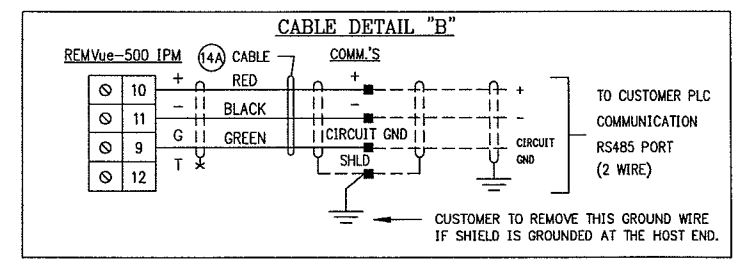
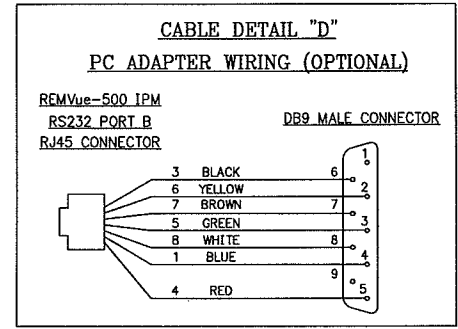
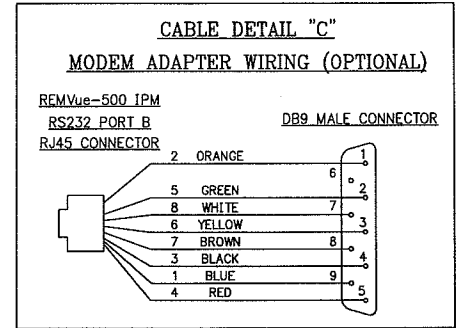
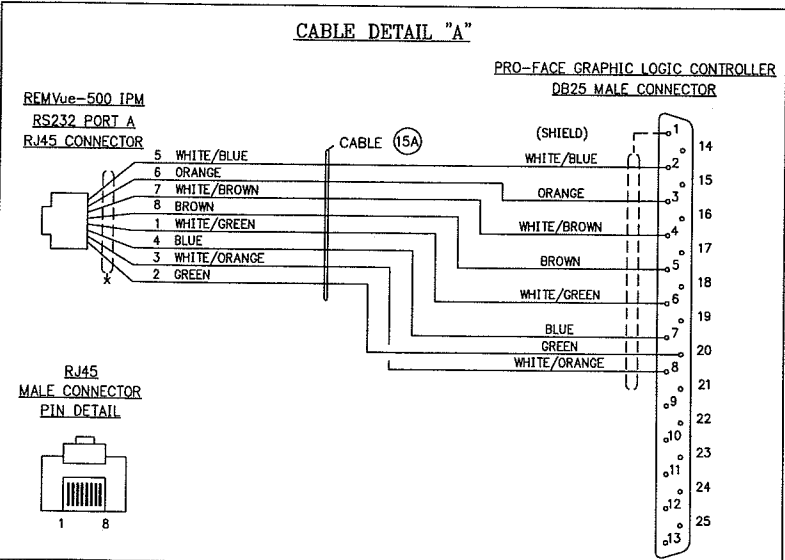
WIRE COLOUR CODE	
GROUND	GREEN
+24 VDC	RED
24 VDC SWITCHED	ORANGE
0 VDC	BLUE
0 VDC SWITCHED	MEDIUM BLUE

WIRE LEGEND	
PANEL WIRE	—————
FIELD WIRE	- - - - -

PRO-FACE GRAPHIC LOGIC CONTROLLER (REAR VIEW)



REMVue-500 ST WIRING COLOUR CODE	
ST A	GREEN
ST B	WHITE
SHIELD	SHIELD
ST C	RED
ST D	BLACK



A DAISY CHAIN WIRING CONFIGURATION SHOULD BE USED TO CONNECT THE HOST AND SLAVE DEVICES. ALL CABLE SHIELDS SHOULD BE CONNECTED AND GROUNDING AT ONE END ONLY (AT THE HOST END IF POSSIBLE). 150 OHM TERMINATION RESISTORS SHOULD BE INSTALLED AT THE HOST AND THE LAST SLAVE ON THE BUS. THE REMVue 500 IPM HAS INTERNAL TERMINATION COMPONENTS (150 OHM RESISTOR AND 0.1µF CAP. IN SERIES). TIE TERMINAL T (12) TO RS485- (11) TO UTILIZE THE INTERNAL TERMINATION.

COMMUNICATIONS		
ADDR	BAUD	CONFIG
17	9600	N,8,1

SPARTAN CONTROLS
ONSTREAM MOBILE GAS SERVICES

TRAILER UNIT
COMPRESSOR UNIT CONTROL PANEL (REMVue-500/S)
REMVue-500 WIRING DETAILS
REF. #703

PROJECT No. PN13322 SCALE: NTS DRAWING No. RM-13322-AA-500-01 REV. 2

RM13322AA50001.DWG - 02 MAR 06 10:14 am

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		A	ISSUED FOR APPROVAL	12 JUL 05	JQY	BWK	BWK	BWK

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