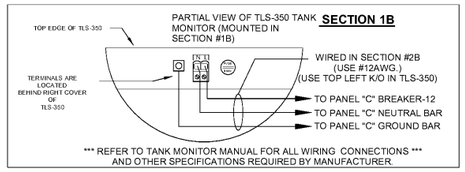


TANK MONITOR/PUMP SHUTDOWN

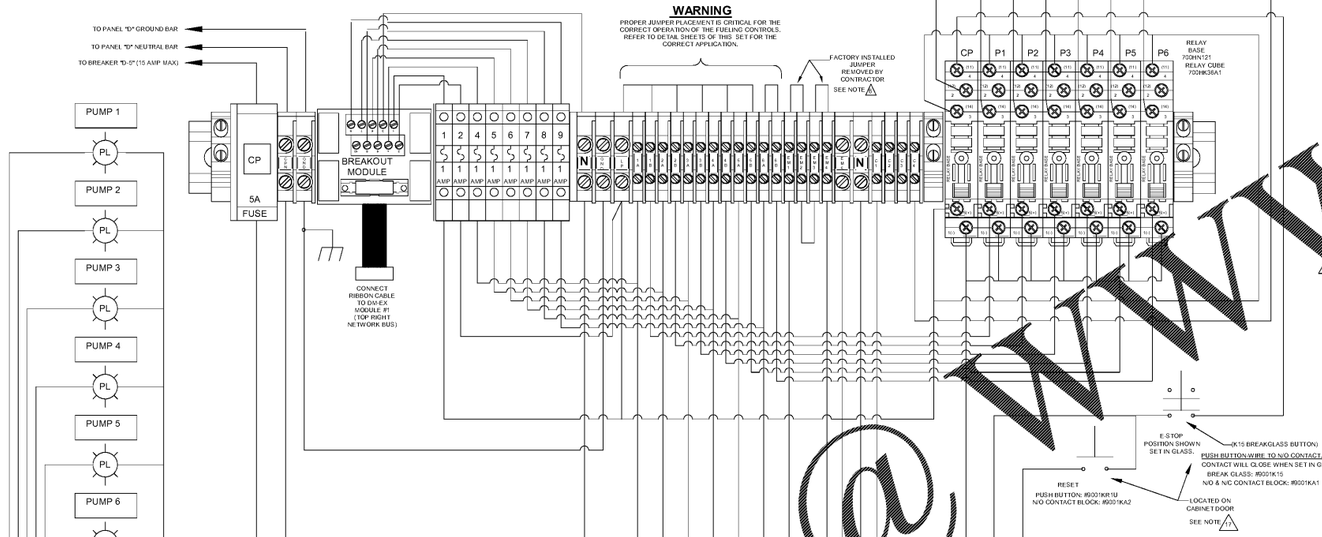
OPTION WITH CONVENTIONAL SUBMERSIBLE PUMPS

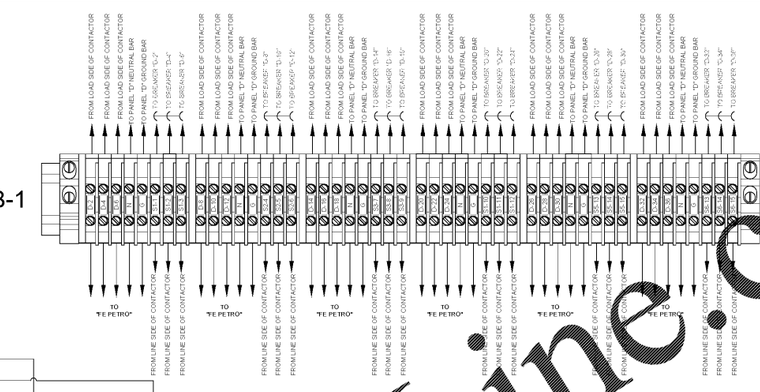
1. WHEN INDIVIDUAL SHUTDOWN OF DISPENSERS THRU THE TANK MONITOR IS REQUIRED REMOVE THE FACTORY INSTALLED "REMOTE OFF" JUMPERS FROM THE DM-EX MODULES. CONNECT THESE TERMINALS TO RELAY OUTPUT MODULE AS SHOWN. THIS WILL ALLOW THE TANK MONITOR TO SHUTDOWN ANY DISPENSER THROUGH THE RELAY OUTPUT MODULE.
2. REFER TO TANK MONITOR MANUAL FOR ALL WIRING CONNECTIONS AND OTHER SPECIFICATIONS REQUIRED BY MANUFACTURER
3. THE TANK MONITOR IS TYPICALLY MOUNTED OUTSIDE THE POWERBOX ENCLOSURE ON AN ADJACENT WALL.
4. THE TANK MONITOR SHOWN IS FOR A TYPICAL "PUMP SHUTDOWN" RELAY BOARD ONLY. FOR "LINE PRESSURE" SYSTEM DETAIL SHEETS.
5. THIS DETAIL IS TO ILLUSTRATE WIRING OF (1) CONVENTIONAL PUMP.
6. THE TERMINAL STRIP SHOWN IS FOR THE STANDARD DM-EX DESIGN. THE STANDARD DM-EX DESIGN MAY BE CUSTOMIZED FOR ADDITIONAL PUMP DEVICES, THERE BY ALTERING THE STANDARD DESIGN SHOWN. PLEASE REFER TO ALL INFORMATION TO DETERMINE THE NUMBER OF DEVICES FOR EACH JOB LOCATION.

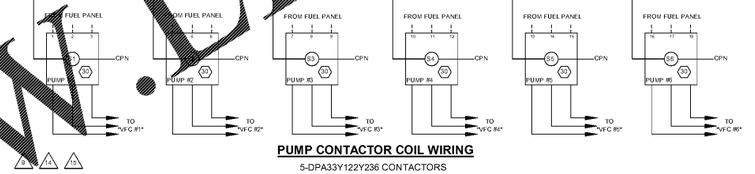
DISPENSER FIELD WIRING

NOTES.

1. WIRING IS TYPICAL OF ALL DISPENSERS. GROUND CONDUCTOR (#12 AWG) MUST ALSO BE RUN FROM EACH DISPENSER TO THE GROUND BAR OF THE DISPENSER/PUMP CONTROL PANEL.
2. DISPENSER "AC" (POWER) AND "DC" (DATA) TYPICALLY RUN IN SEPARATE CONDUITS, OR PER DISPENSER MANUFACTURERS REQUIREMENTS.
3. SEE DISPENSER INSTALLATION DIAGRAMS FOR TERMINATION LABELING.
4. ALL FIELD WIRING TERMINALS MUST BE WIRED WITH A MINIMUM INSULATION RATING OF 60°C.
5. FACTORY INSTALLED "REMOTE OFF" JUMPERS ON DM-EX MODULES MUST REMAIN IN PLACE DURING NORMAL OPERATION. REMOVING THIS JUMPER AND WIRING INTO A "DAN SENSOR" SYSTEM PROVIDES INDIVIDUAL SHUTDOWN OF EACH DISPENSER.
6. THE WIRE SIZE AND NUMBER OF CONDUCTORS REQUIRED FOR COMMUNICATION DATA (DC) WIRING MUST BE DETERMINED BY THE SPECIFICATIONS OF THE DISPENSER MANUFACTURER. TYPICALLY 2 CONDUCTORS (NORMALLY SHIELDED CABLE) ARE REQUIRED WHEN CARD READERS IN THE DISPENSER ARE USED.







PUMP CONTACTOR COIL WIRING

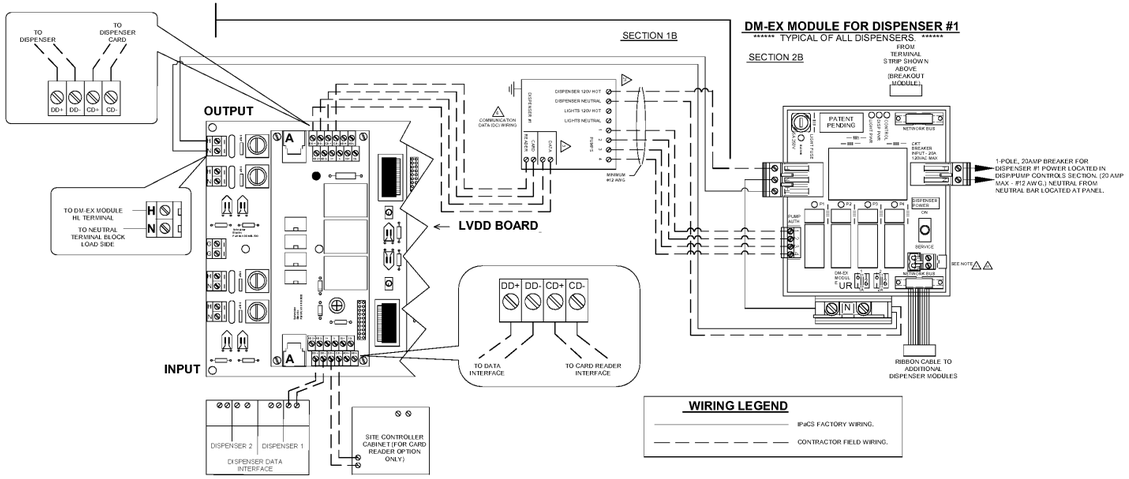
5-DPA33Y122Y236 CONTACTORS

DISPENSER DM-EX MODULE CHART

DISPENSER NUMBER	BREAKER DESCRIPTION		VOLTAGE	AMPS	CIRCUIT INFO	
	EQUIPMENT	NUMBER			PNL	CKT. #
DM-EX #7	DISPENSER	7	120 V	20.0 A	D	19
DM-EX #6	DISPENSER	6	120 V	20.0 A	D	17
DM-EX #5	DISPENSER	5	120 V	20.0 A	D	15
DM-EX #4	DISPENSER	4	120 V	20.0 A	D	13
DM-EX #3	DISPENSER	3	120 V	20.0 A	D	11
DM-EX #2	DISPENSER	2	120 V	20.0 A	D	9
DM-EX #1	DISPENSER	1	120 V	20.0 A	D	7
DM-EX #1	DISPENSER		120 V	20.0 A		

SUBMERSIBLE PUMP EQUIPMENT SCHEDULE

EQUIPMENT	VOLTAGE	CONTACTOR NUMBER	AMPS	CIRCUIT INFO		OUT PUT
				PNL.	CKT.	
STP-1 (REGULAR #7-1)	208 V	1	15.0 A	D	2,4,6	S1
STP-2 (DIESEL)	208 V	2	7.0 A	D	8,10,12	S4
STP-3 (PREMIUM)	208 V	3	7.0 A	D	14,16,18	S3
STP-4 (E85)	208 V	4	7.0 A	D	20,22,24	S5
STP-5 (REGULAR)	208 V	5	15.0 A	D	26,28,30	S2
STP-6 (E0)	208 V	6	7.0 A	D	32,34,36	S6



WIRING LEGEND

- IPaCS FACTORY WIRING.
- CONTRACTOR FIELD WIRING.

GENERAL NOTES FOR DISPENSER/PUMP CONTROLS:

1. BEFORE STARTING THE ASSEMBLY PROCESS PLEASE READ ALL NOTES.
2. ALL FIELD WIRING TERMINALS MUST BE WIRED WITH A MINIMUM INSULATION RATING OF 60°C IF CIRCUIT IS RATED LESS THAN 100 AMPS. OR A MINIMUM INSULATION RATING OF 75°C IF CIRCUIT IS RATED OVER 100 AMPS.
3. WHEN CONTROLLED LOAD IS A MOTOR, CIRCUITS MUST HAVE THERMAL PROTECTION INTEGRAL TO MOTOR OR PROVIDED BY OTHERS.
4. THIS DRAWING CONTAINS ALL THE FACTORY WIRING REQUIRED TO ASSEMBLE THESE CONTROLS. FOR A COMPLETE EXAMPLE OF ALL FIELD WIRING FOR THESE CONTROLS PLEASE SEE THE DETAILS DRAWING IN THIS SET.
5. THE WIRE GAUGE USED TO ASSEMBLE THESE CONTROLS VARIES THROUGHOUT. TO DETERMINE WIRE SIZE THAT SHOULD BE USED PLEASE CHECK THE AMPERAGE OF EACH CIRCUIT CONTROLLING THESE COMPONENTS. THE AMPERAGE IS DETERMINED BY THE PANELBOARD SCHEDULES DRAWING LOCATED IN THIS SET.
6. IF THERE ARE ANY QUESTIONS ABOUT THE PLACEMENT OF ANY NON-STANDARD DEVICES ON THE DISPENSER/PUMP CONTROLS SCREEN PLEASE CONTACT THE DRAFTING DEPARTMENT TO DETERMINE PROPER PLACEMENT.
7. WHEN "ST-VFC" DEVICES ARE FACTORY INSTALLED, THE EQUIPMENT SHOULD BE MOUNTED IN THE TOP OF THE DISPENSER/PUMP CONTROLS SECTION. WHEN MOUNTED OUTSIDE OF THE P.B.S. BOX PLACEMENT OF THESE DEVICES SHOULD BE DETERMINED BY THE CONTRACTOR.
8. NOT USED
9. THE DISPENSER CONTROL WIRING SHOWN ON THIS DRAWING IS FOR ONE DISPENSER, ALTHOUGH THE NUMBER OF DISPENSERS USED FOR EACH JOB MAY VARY THE WIRING SHOWN IS TYPICAL OF ALL DISPENSERS.
10. THE PILOT LIGHTS SHOWN ON THIS DRAWING ARE TO VISUALLY VERIFY THE OPERATION OF EACH PUMP. ALL PILOT LIGHTS SHOWN SHOULD BE MOUNTED ON THE DOOR OF THE DISPENSER/PUMP CONTROLS SECTION.
11. THE MOMENTARY SWITCHES FOR "FUEL SHUTDOWN" AND "FUEL RESET" SHOWN ON THIS DRAWING SHOULD BE MOUNTED ON THE DOOR OF THE DISPENSER/PUMP CONTROLS SECTION.

1 CONTROL DIAGRAMS
N.T.S

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DESIGN PROFESSIONALS
HILLFOLEYROSSI & ASSOCIATES
ARCHITECTURE
ENGINEERING
3680 Pleasant Hill Road
Suite 200
Duluth, Georgia 30096
p 770.622.9858
f 770.622.9535
www.hillfoleyrossi.com

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RaceTrac®
RACETRAC PETROLEUM, INC.
200 GALLERIA PARKWAY SOUTHEAST
SUITE 900
ATLANTA, GEORGIA 30339
(770) 431-7600

PROJECT NAME

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