

# SDE SERIES

## Economy Day Tanks

The Simplex SDE Series Economy Day Tank is a Basic Automatic Day Tank intended for those applications which require a simple self-refilling day tank only, with a minimum of options. The SDE Day Tank includes a basic differential level control, 3-point electric level indicator, 1/3 HP, 115-1-60/2 GPM pump plus tank of required size with ports and fittings. Tanks are UL142 labeled (except "Slim" design). A limited number of options are available for the SDE Line (see list on page 3).

For capability in excess of the SDE Line, use the Simplex SST Series Packaged Design Day Tank Systems.

### Construction:

- All seam welded, square, atmospheric tank of heavy gauge steel with internal reinforcements, tested to 5PSI pressure
- Welded flange pipe fittings for fuel return, overflow, vent, drain
- Fuel supply suction drop tube
- Heavy gauge steel channel feet with mounting holes
- Removable steel top cover

### Finish

- Epoxy coated interior
- Exterior of tank chemically treated to resist corrosion, primed and finish painted light gray
- Removable equipment cover painted blue



### MODELS

<input type="checkbox"/>	SDE10 Slim*	10 gal.
<input type="checkbox"/>	SDE20 Slim*	20 gal.
<input type="checkbox"/>	SDE10	10 gal.
<input type="checkbox"/>	SDE25	25 gal.
<input type="checkbox"/>	SDE50	50 gal.
<input type="checkbox"/>	SDE75	75 gal.
<input type="checkbox"/>	SDE100	100 gal.

\* SLIM DESIGN NOT AVAILABLE WITH UL LABEL

• FOR LARGER SIZE TANKS, USE THE SST SERIES

### SDE Controller:

Differential level control, pump start at 50%, pump stop at 100% 0.33HP/115V AC pump control relay.

Press-to-test push-button.

Three-point electric level indicator with neon lights for:

- Low level, < 50 %
- Normal operating range, 50-100%
- Tank Full

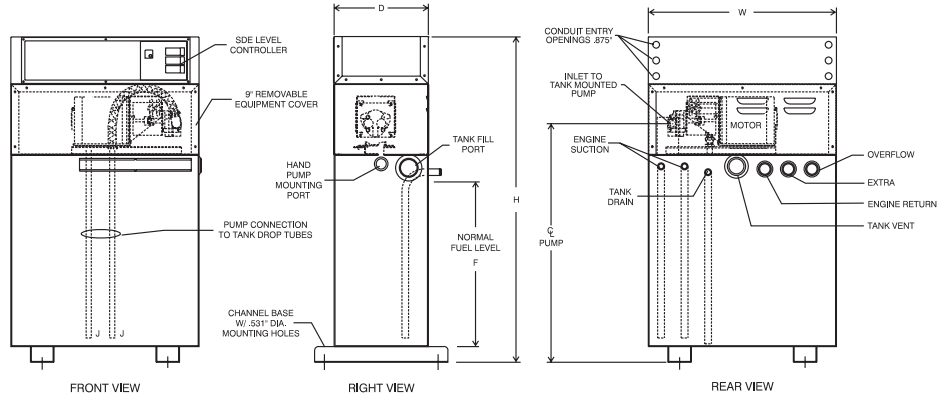


# SIMPLX®

### Specifications



### Standard Tanks



### Dimensions and Weights

SDE, SST Standard Models Capacity		W		H		D		F		C <sub>L</sub>		Shipping Weight	
Gallons	Liters	In.	Cm.	In.	Cm.	In.	Cm.	In.	Cm.	In.	Cm.	Lbs.	Kg.
10	38	24	61	29	74	12	31	12	30	18	44	126	58
25	95	24	61	41	104	12	31	24	63	30	77	169	77
50	190	24	61	46	117	18	45	31	79	37	93	210	95
75	285	24	61	63	160	18	45	44	112	50	127	212	96
100	380	24	61	61	155	24	60	44	112	50	127	232	105
Slim 10	38	30	76	34	86	5	13	24	61			110	50
Slim 20	76	30	76	34	86	8	20	24	61	29	74	130	59

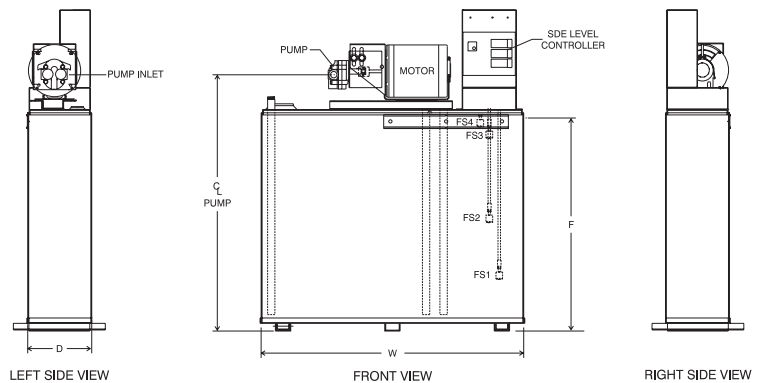
### Standard Pipe Fittings

Fitting	Type	Capacity Model (Gal.)					Slim			
		10	25	50	75	100	10	20		
Pump Inlet	F	2 Gpm = 0.5 / 7 Gpm = 0.75								
Engine Suction	M	.50								
Engine Return	F	1.0								
Overflow	F	1.0								
Vent	F	1.25	1.50	2.0	3.0	3.0	1.0	1.0		
Drain	F	.375								

F = Female, M = Male, pipe threads (NPT inches)

Additional fittings available as options, specify option #120, #125, #130, and #131

### Slim Tanks



### Description

- 2 GPM, high vacuum positive displacement gear pump consisting of two pressure loaded intermeshing, hardened steel, precision ground gear assemblies within a high strength die cast aluminum housing. Mechanical shaft seal. Pressure loaded to be self-compensating for internal wear.
- 1/3 HP, 120V, single-phase ODP motor. Oversized for high starting torque.
- Motor overload protection

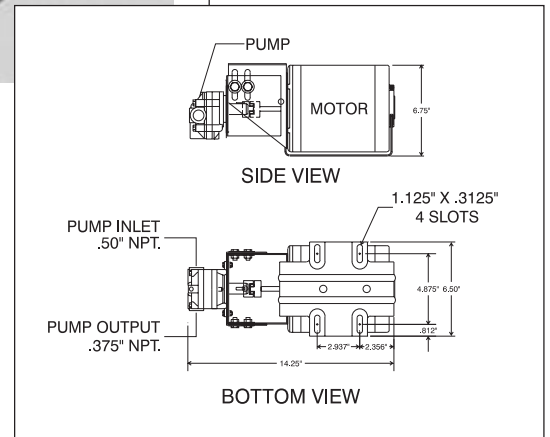
### Recommended Option #070

- Check valve to maintain prime
- Fuel line priming tee
- Pump priming tee

	STANDARD	OPTIONAL
<b>PUMP CAPACITY</b>	<b>2 GPM</b>	<b>7 GPM</b>
<b>MOTOR (HP)</b>	<b>.33</b>	<b>0.5</b>
<b>VOLTAGE</b>	<b>115-1-60</b>	<b>230-1-60, 115/230-1-50</b>



### Super-XL Pump



### Mechanical

- 010 Auxiliary hand pump
- 015 Auxiliary hand pump
- 025 Manual fuel fill cap
- 040 Wall-mounting brackets
- 050 Pipe stand adapter
- 060 Fuel strainer
- 063 Vent cap
- 065 Drain hand valve
- 070 Priming tee & check valve assembly
- 080 AC Solenoid valve
- 087 Manual shut-off valve
- 090 Foot valve
- 110 Remote pumping unit
- 120 Extra 1" NPR pipe connection
- 125 Extra supply suction tube
- 130 Oversize pipe connection, 1 1/4" to 2 1/2" NPT
- 180 Weatherproof Modification
- 190 Overflow basin
- 191 Rupture float switch
- 196 Weatherproof cover for overflow basin

### Control Devices and Alarms

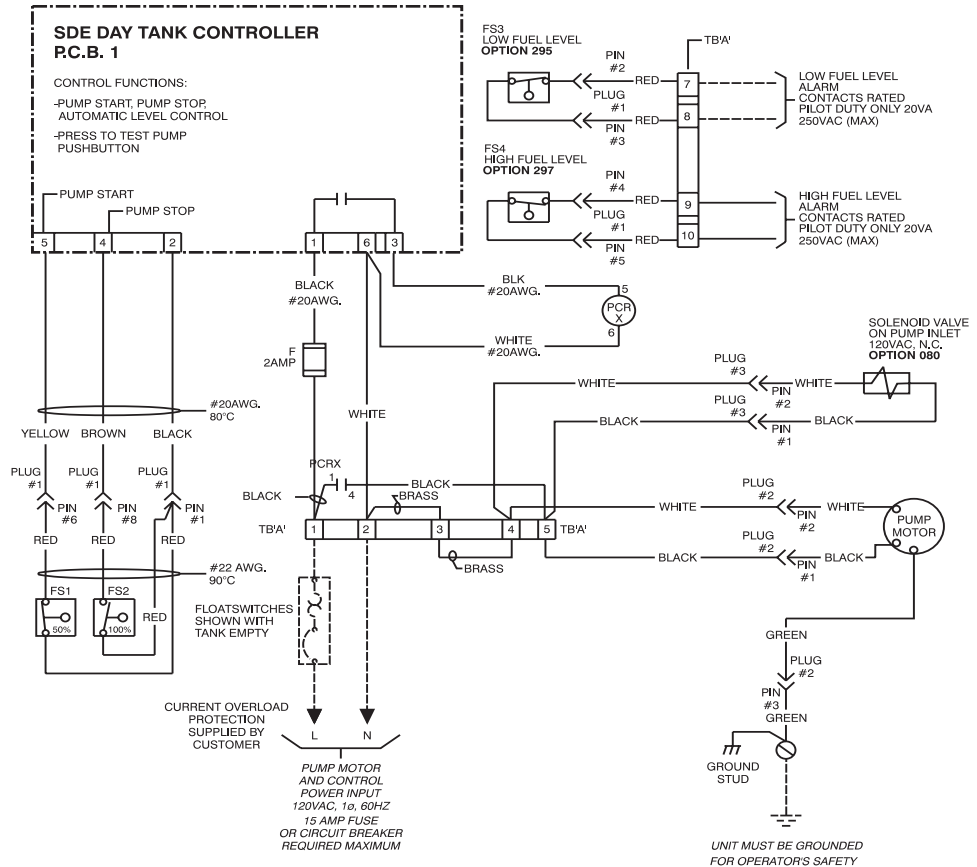
- 261a Input circuit breaker
- 262 Control power transformer
- 270 Power available green pilot light
- 295 Remote low fuel level alarm dry signal contacts
- 297 Remote high fuel level alarm dry signal contacts
- 299 Auxiliary relay, use w/options 295 & 297 above
- 326 High level cutout
- 340 "Pump Running" amber light

### Pumps and Motors

- 400 7 GPM pump
- 700 1/2 HP, 115V AC, 1Ø, 60 Hz motor
- 002 Deletion of pump

### Options Checklist

### Electrical Connections



- NOTES:**
1. ALL WIRES ARE #14 AWG UNLESS OTHERWISE NOTED.
  2. DASHED LINES (---) INDICATE WIRING NOT SUPPLIED BY SIMPLEX.
  3. COMPONENTS MOUNTED ON PRINTED CIRCUIT BOARD ARE ENCLOSED BY DASHED LINES (-----).
  4. PLUG #1 CONNECTOR FOR FLOATSWITCH ASSEMBLY TO SDE CONTROLLER.
  5. PLUG #2 CONNECTOR FOR PUMP MOTOR TO SDE CONTROLLER.
  6. PLUG #3 CONNECTOR FOR SOLENOID VALVE TO SDE CONTROLLER.

### Legend/Parts List

ITEM	PART NO.	DESCRIPTION
FS1, FS2	25242150	Float Switch SPST, 20 VA, Pilot Duty
FS3	25242150	Low Level Float Switch SPST, 20 VA, Pilot Duty, <b>Option #295</b>
FS4	25242150	Float Switch SPST, 20 VA, Pilot Duty, <b>Option #297</b>
MOT	24626100	Motor 1/3 HP, 115 VAC, 1ø, 60 Hz, 6.6 FLA, Thermally protected, auto reset
MOT	24626100	Motor 1/2 HP, 115 VAC, 1ø, 60 Hz, 9.2 FLA, Thermally protected, auto reset, <b>Option #700</b>
PC.B.1	50001200	Liquid Level Controller, 120 VAC Input, 2 Liquid Levels
TB'A'	25663400	Field Connection Terminal Block 20A, 300V 12 Line
PCRX	24777000	Motor starting contactor, 120 VAC, 1 Pole N.O. Rated 1 HP @ 125 VAC, 2 HP @ 250 VAC, 30 AMP, 277 VAC (Resistive)
F	14010000	Fuse, 2 AMP, 250 VAC, AGC-2
[F]	15004500	Fuse Block, 1 Pole, 15 AMP, 250V, AGC