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**PACIFIC DESIGN TECHNOLOGIES, INC.**

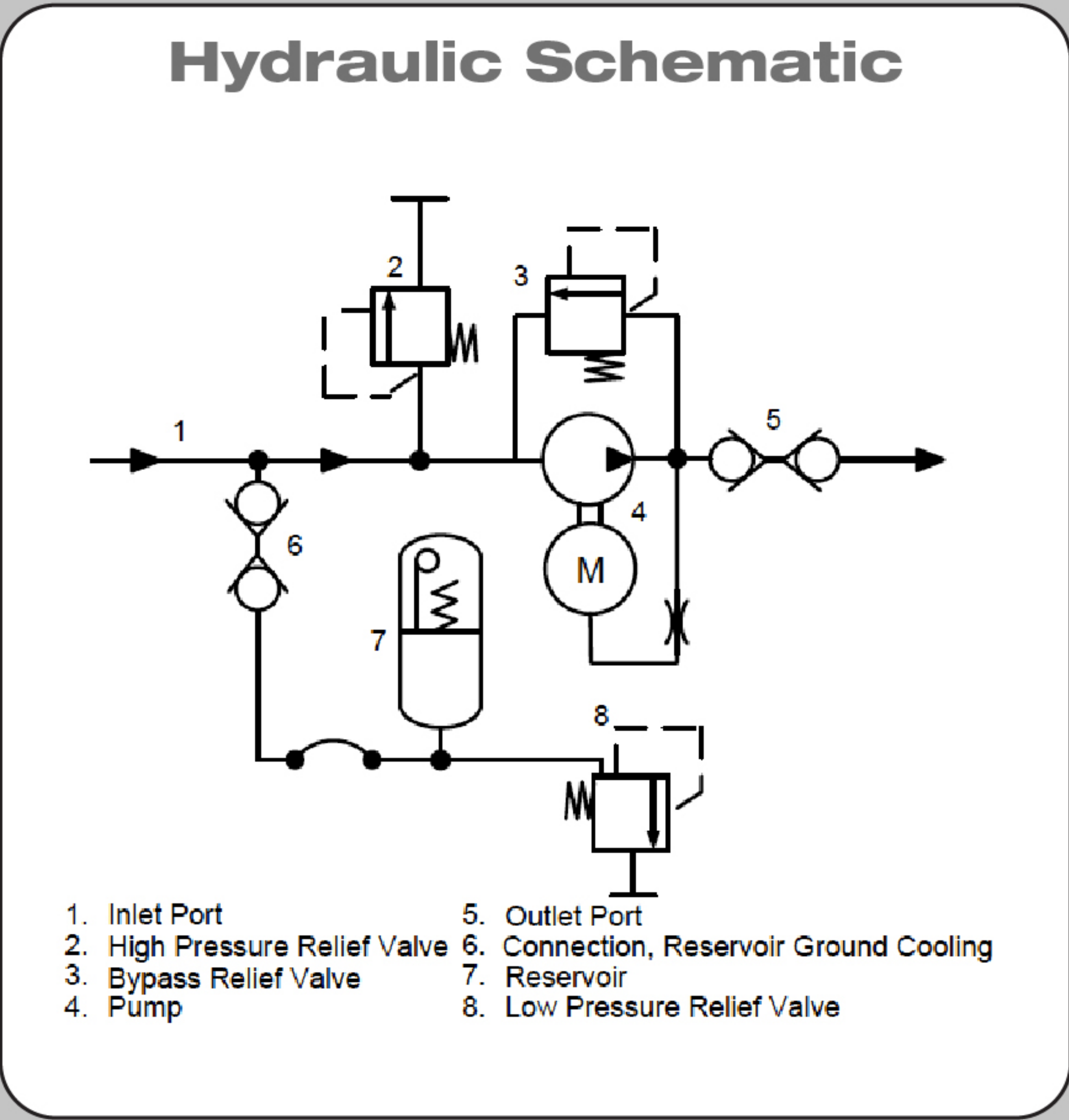
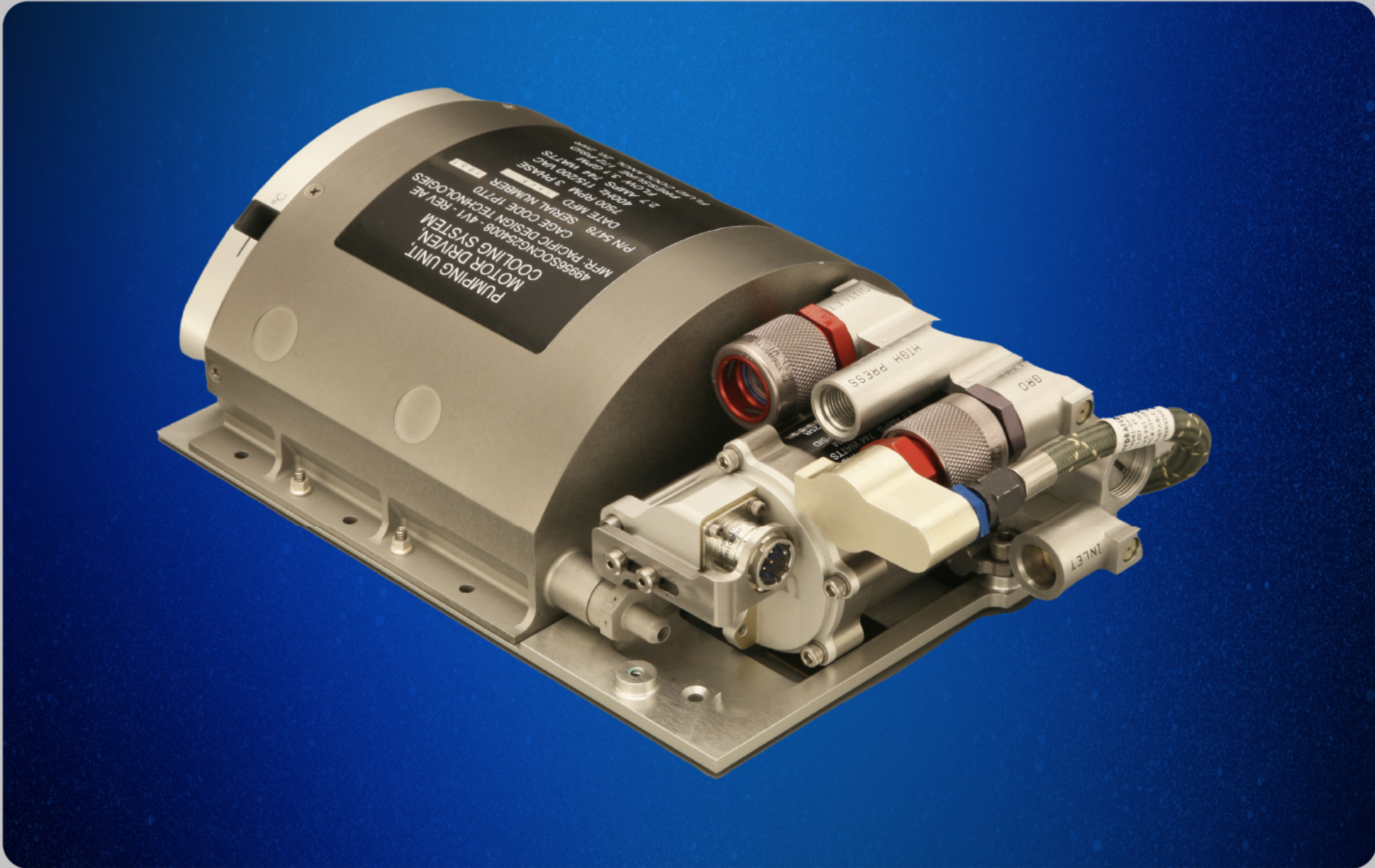
# **Thermal Management Solutions**

**Model 5478 Motor Driven Cooling System**

**Datasheet**



Pumping Unit, Motor Driven, Cooling System  
PDT Model 5478



Description

PDT Model 5478 Pumping Unit is designed for operation within a Fighter Aircraft wing pod. The Unit's unique envelope dictated the design of an accumulator with a D-shaped piston. A Maintenance Lockout Mechanism has been integrated as a reliability enhancement. Model 5478 is fully qualified to MIL-STD-810 environmental conditions and MIL-STD-461 EMI requirements.

Specification

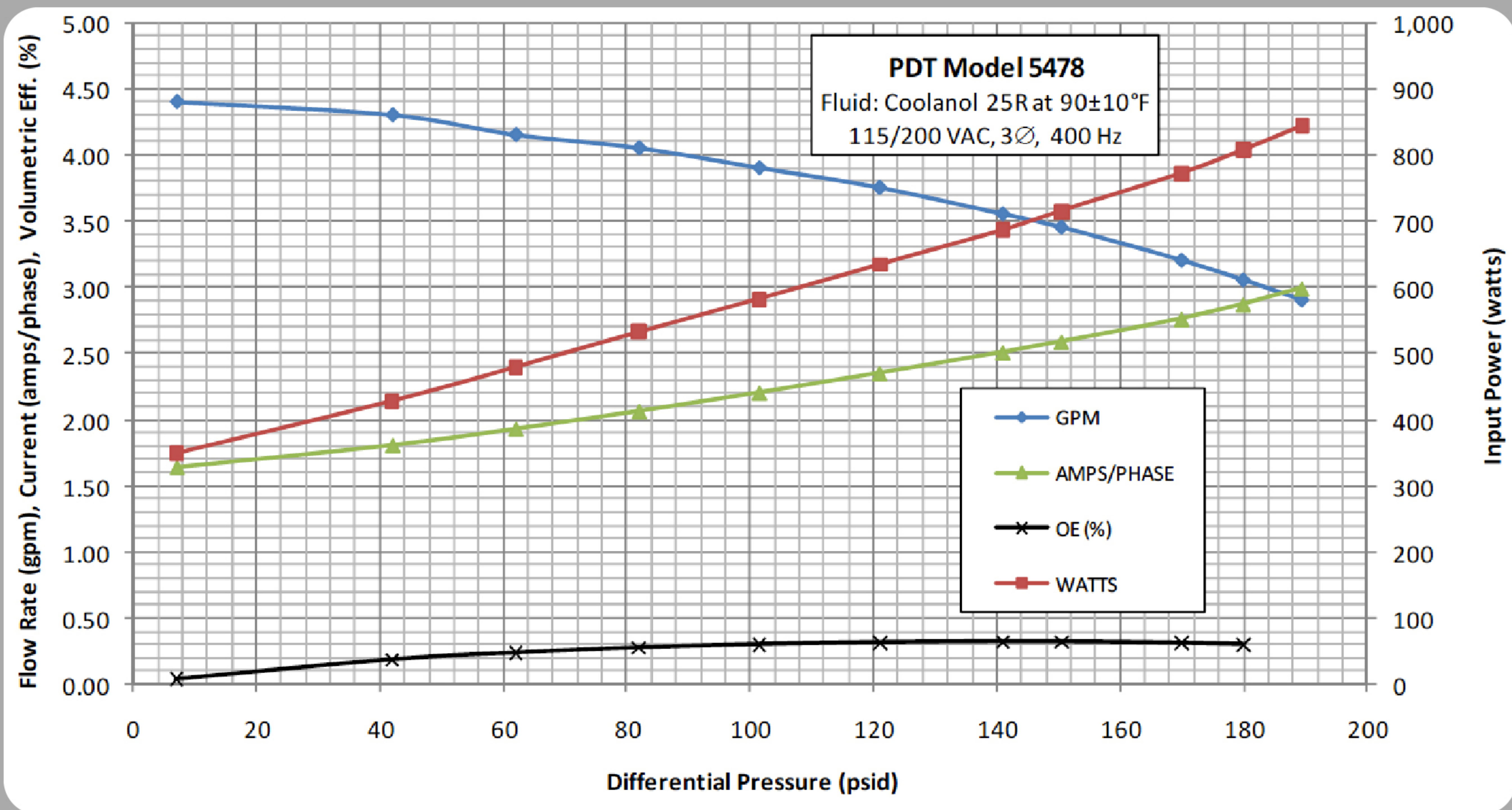
5501 Pump Parameters

|                     |                                                               |
|---------------------|---------------------------------------------------------------|
| Fluid:              | Coolanol 20 or Coolanol 25R per MIL-C-47220                   |
| Pump Flow:          | 3.1 gpm @ 172 psid                                            |
| Inlet Pressure:     | 3 psig @ 21°C                                                 |
| Temperature Ranges: | Operating: -54°C to +95°C<br>Ambient Storage: -62°C to +125°C |
| Operating Voltage:  | 115/200 VAC 3 Ø 400 Hz                                        |
| Power Consumption:  | 744 Watts                                                     |
| Current:            | 2.73 amps / Ø (avg)                                           |
| Pressure:           | Proof: 275 psid<br>Burst: 460 psid                            |
| Pump Type:          | Positive Displacement                                         |
| Weight:             | 10.5 lbs (max, dry)                                           |

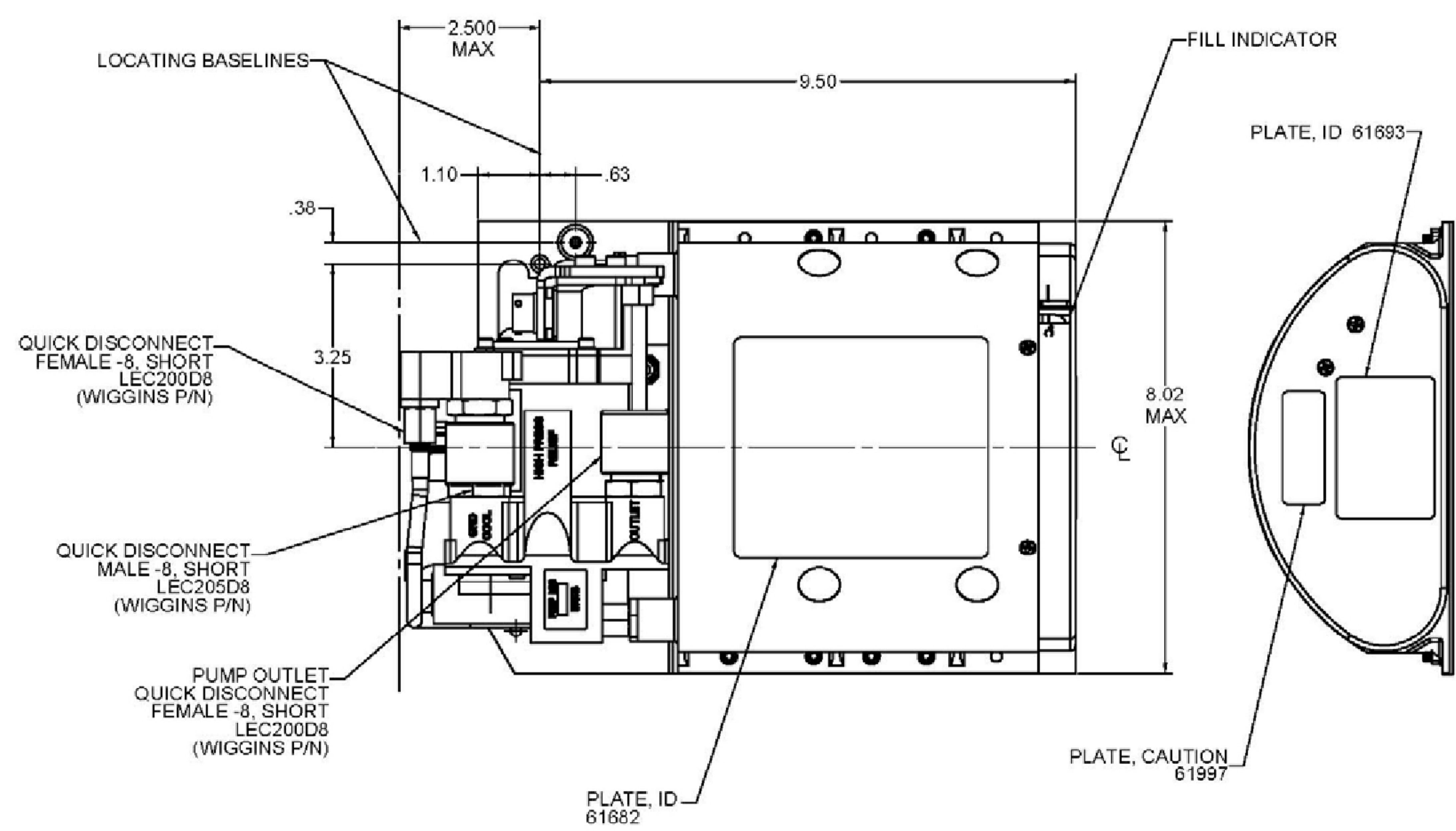
|           |                                                                                |
|-----------|--------------------------------------------------------------------------------|
| Pressure: | Operating: 0.5 psig (min) to 12 psig (max)<br>Proof: 16 psig<br>Burst: 32 psig |
| Volume:   | 83 cu in.                                                                      |

Pumping Unit, Motor Driven, Cooling System  
PDT Model 5478

Performance Graph



Outline  
Dimensions are in inches.





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*Our people are part of our product.*