



DAYLIFF FLA packaged Fire Sets are specially designed to provide automatic supply to multiple hose reel or sprinkler outlets for firefighting installations. Standard sets combine parallel duty diesel and electric powered supply pumps to ensure serviceability in all conditions as well as a jockey pump to maintain system pressure. Particular features include:-

- Individual electric motor and Kohler diesel engine powered DAYLIFF DE pump sets providing standby supply in the event of electrical power failure
- Separate automatic jockey pump to maintain system pressure and regulate main pump operation
- Bellows type pressure switch controlled operation providing progressive jockey pump, electric pump and diesel pump starting at reducing cut-in pressures
- Low maintenance diaphragm type pressure vessel to regulate pump cycling.
- Integral control panel providing automatic parallel operation of the supply pumps and incorporating electrical protection and a DC battery charging system
- Compact frame mounted design incorporating necessary valves and piping for simple site installation.

Systems are designed to give their rated output at 5 Bar and four standard sizes are available 40, 70, 130 and 240m³/hr with the two pumpsets operating in parallel, 50% standby output being provided in the event of electrical failure. For particular applications special designs incorporating different equipment arrangements and specifications are available. For all firefighting applications high levels of equipment performance and dependability are vitally important for the protection of both lives and property. DAYLIFF FLA Fire Sets combine quality components, all carefully matched for optimal operational efficiency with Davis and Shirliff's unmatched pumping expertise and competitive pricing to provide effective, reliable and easy to install firefighting solutions.

Specifications

Supply Pumps: DAYLIFF single stage end suction pumps featuring gland packing seal and heavy duty bearings constructed from heavy duty cast iron with bronze impellers. Pumps models are selected to meet the design pressure and flow rates. Detail performance curves are available on request.

Diesel Engine: Kohler naturally aspirated air-cooled diesel engines fitted with automatic electric start, engine mounted fuel tank and a dual 50Ah battery set.

Electric Motor: TEFC squirrel cage 2-pole 2900 rpm electric motors suitably rated for the pump load.

Jockey Pump: DAYLIFF DB 4-60 horizontal multistage centrifugal pump fitted with 1kW electric motor. The pump is set to maintain system pressure at 4.5Bar thus avoiding cycling of the service pumps due to minor system leakages.

Pressure Vessel: 300 litre vertical pressure vessel fitted with butyl rubber diaphragm. The oversized vessel volume limits jockey pump cycling frequency to a maximum of 10 starts per hour.

Piping: Suitably sized piping and fittings are provided for direct suction and delivery line connections including necessary isolating gate valves, non-return valves on the system outlet. The limit of piping is shown in the schematic drawing.

Control Panel: Control panel incorporating incoming mains isolator and MCB, voltage control relay, MCB and star-delta starter for the main pump, MCB and DOL starter for the jockey pump, pump run/trip/no water indicators, 12-Volt DC power circuit for the engine, a DC battery charging system and a PLC to control operating sequence. The panel is integrally mounted as standard, though can be supplied loose for remote installation if required.

Pump Data

Model	Parallel Duty (m ³ /hr)	Single Duty (m ³ /hr)	Diesel Pump						Electric Pump			Head (m)	Piping Size	Weight (kg)
			Pump	Engine	Power (kW)	Speed (rpm)	Output (m ³ /hr)	Head (m)	Pump	Motor (kW)	Output (m ³ /hr)			
FLA 40	40	20	DE32-20	KD477.2	13.5	3000	23	55	DE32-20	7.5	23	55	2.5"	570
FLA 60	70	35	DE40-20	KD477.2	13.5	3000	36	55	DE40-20	11	36	55	3"	640
FLA 100	130	65	DE50-20	KD625.2	17.0	3000	61	55	DE50-20	15	61	55	4"	665
FLA 120	240	120	DE65-20	KD626.3	26.3	3000	72	55	DE65-20	30	72	55	4"	730