

# APPLICATION PROFILE

## Global Drive Systems

### Variable Speed AC Drives for Pump Jack Solutions

Providing users with easy installation in Pump Jack systems, the Allen-Bradley® PowerFlex® 700 AC drive offers a wide range of built-in features allowing for seamless pump jack system control. Available in power ratings of 25-125 Hp @ 380-480VAC / 3-Phase, 20-75 Hp @ 380-480VAC / 1-Phase, the PowerFlex 700 AC drive is designed to meet global OEM, contractor and end-user demands for flexibility, space savings and ease-of-use. The PowerFlex 700 AC drive is a cost-effective solution for speed control in constant torque Pump Jack Applications.

#### Features

- NEMA/UL Type 3R enclosure rated for outdoor all-weather use
  - Thermostatically controlled cold climate heater and cooling fans
  - Light weight aluminum enclosure
- Adjustable speed ramp to reduce starting wear on mechanical pumping equipment
- Variable speed control to allow for a reduced “pump off” condition
- Standard braking transistor to allow for optional NEMA/UL Type 3R Resistor package that handles excess regenerative energy
- Sensorless Vector Control to allow the PowerFlex 700 drive to develop high torque over a wide speed range, and adapt to individual motor characteristics
- Door mounted devices include:
  - Digital HIM module
  - Auto / Off / Manual selector switch
  - Drive ready LED
- Power quality features include:
  - 5% input line reactor
  - Transient voltage surge suppressor



#### Communications:

- Drive mounted digital HIM allows easy access to programming parameters and set-up features
- Supports Drive Serial Interface (DSI) communication modules and accessories
- DriveExplorer™ and DriveTools™ SP software can be used to easily program, monitor and control the drives

#### Drive Mounted Multi-line Display

- Presents data in correct format
- Displayed in user defined units (e.g. gal/min, cfm)

#### Easy to use & understand

- Data presented clearly
- Pop-up menus and messages for better alerts / access



# Specifications

<b>Standards</b>	• UL and cUL Listed				
<b>Input Specifications</b>	1 or 3-Phase Voltage: 380-480V +/-10% Frequency: 48-63 Hz Logic Control Ride Through: >= 0.5 seconds, 2 seconds typical				
<b>Output Specifications</b>	Voltage: Adjustable from 0V to rated motor voltage Frequency Range: 0 to 320 Hz Overload Current: 150% for 60 seconds				
<b>Enclosure and Ambient Operating Temperature</b>	NEMA/UL Type 3R: -28 to 50°C (-20 to 122 °F)				
<b>Options (Accessories)</b>	Communication: ControlNet™, DeviceNet™, EtherNet/IP™ and PROFIBUS™ Communication Cards DSI Cables EMC Line Filters Load Reactors				
<b>Ratings</b>	Voltage Class	kW (HP)	Cont. Output Current (Amps)	Frame	Panel Dimensions (HxW) mm (in)
	380-480V	18.5 (25)	40	3	1722.2 x 914.4 (68x36)
	380-480V	30 (40)	65	3	1722.2 x 914.4 (68x36)
	380-480V	37 (50)	77	4	1722.2 x 914.4 (68x36)
	380-480V	45 (60)	96	5	2032.0 x 914.4 (80 x 36)
	380-480V	75 (100)	156	6	2032.0 x 914.4 (80 x 36)
	380-480V	95 (125)	180	6	2032.0 x 914.4 (80 x 36)



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