

INTRODUCTION

The ACT3 HPS VFD is designed to control, monitor and protect the HPS system, process discrete and analogue signals from external devices such as sensors and pressure switches and provide connectivity to SCADA enabled devices for remote monitoring. Models are available in custom designed NEMA 12 indoor enclosures to suit a wide range of power ratings.

ELECTRICAL SPECIFICATIONS

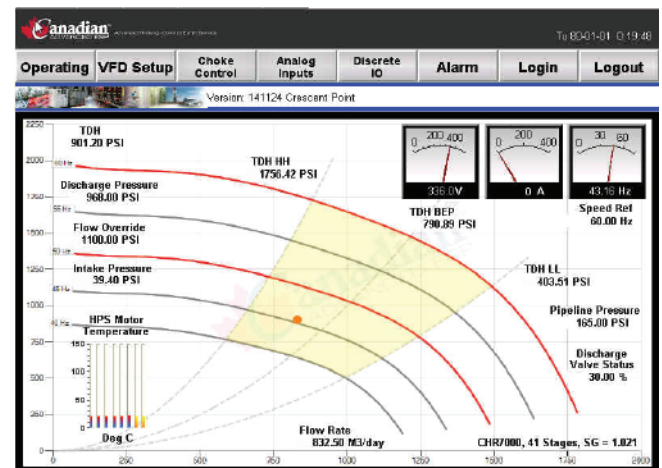
- Available sizes: 50HP to 775HP
- Supply voltage: 3-phase, 480V, 50/60Hz
- Output voltage: Variable 3-phase, up to 460V
- Output frequency: 30Hz to 90Hz (operational)
- Current rating: 70A to 1094A
- Overload rating: 120% 60s, 150% 3s, 50°C

HMI SPECIFICATIONS

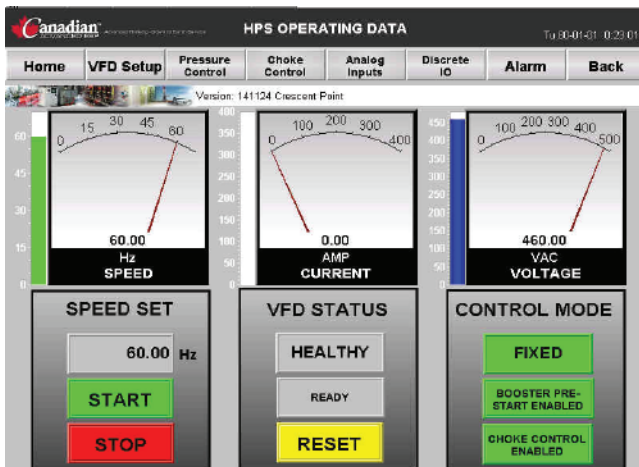
- 10" colour touchscreen operator interface, sunlight readable
- 24 VDC input power supply
- Modbus RTU communication protocol
- Provision for both full duplex and half duplex terminals for field SCADA connectivity
- Six control modes: Fixed, Pressure, PID, Remote I/O, Network and Choke

ENCLOSURE SPECIFICATIONS

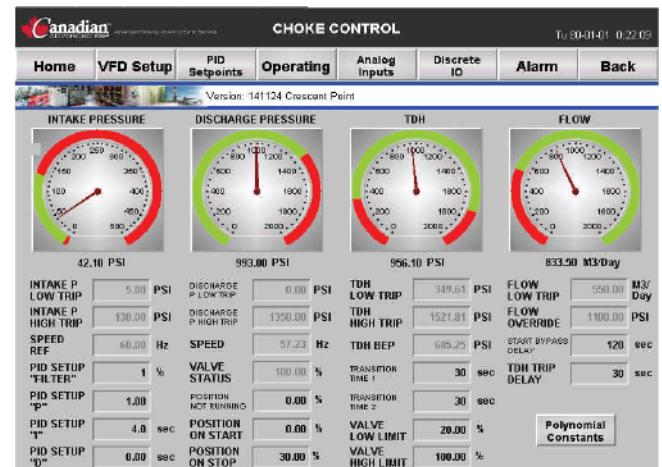
- NEMA 12 indoor rating
- 12 gauge mild steel construction
- ANSI 1101 grey powder paint finish
- 4 lifting lugs for secure and easy transportation



HMI 'Tornado' Screen



HMI Operating Data Screen



HMI 'Choke Control' Screen

Please visit our website at www.cai-esp.com for more information.

FEATURES

- Mitsubishi F700 series inverter
- DC reactor and line reactor to minimise Total Harmonic Current Distortion (THID)
- Thermostat controlled fans with high volumetric flow of air for heat dissipation
- Panel space heater for low temperature environments
- Motor RTD monitoring and protection
- Expanded I/O (analog inputs, 16 discrete inputs, 8 discrete outputs)
- Advanced HMI touch screen
- Rated for -40°C to 50°C ambient temperature conditions
- Incoming lighting arrestors
- Incoming power isolation using circuit breaker
- Door mounted indicating lights and emergency stop
- 480V/120V control transformer for control supply
- Start, stop, reset, local/remote and speed references terminal
- Load reactor



Exterior - 290kVa model

OPTIONAL FEATURES

- UPS power supplies
- CAESP Advanced Monitoring System (AMT) (SCADA System)
- 380V, 50Hz models are available
- NEMA 4 & NEMA 3R outdoor enclosures
- Customizable communication options



Interior - 290kVa model

Every ACT3 is factory tested and certified to Canadian Standards Association (CSA) standards.

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