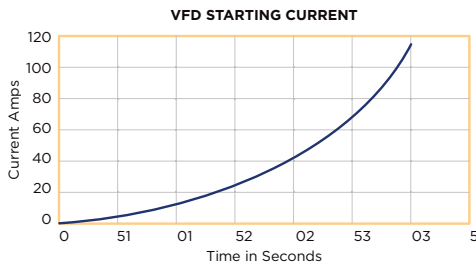


POWERFUL CONTROL & FLEXIBILITY FOR VARIABLE SPEED APPLICATIONS

Developed by pump specialists in collaboration with electrical engineers, Mitchell's Intelligent Control for Agriculture, MICA 202, offers a wide range of powerful standard features, which can be expanded with factory or field installed options, for maximum performance in water, wastewater and irrigation applications.

Optimized for both submersible and above ground pump control and engineered to meet or exceed all state energy and UL safety requirements.

The MICA 202 is powered by the Danfoss VLT Aqua Drive FC 202 to provide the highest level of performance and energy efficiency for AC motor driven applications and is compatible with all new motor technologies.



The Variable Frequency Drive converts AC power to DC pulses to create an AC sine wave that controls both the voltage and frequency output to a motor.

ENERGY SAVINGS

Minimize wear and tear on machinery: By supplying the correct voltage level, VFDs protect and increase the longevity of the system equipment.

Beat peak demand charges: Reduce current peaks when starting large motors with VFDs that gradually ramp the motor up to speed.

Optimize power usage in response to actual load: Manage input power based on system demand and use only the energy required by the driven equipment.

Monitor energy usage: Danfoss FC 202 Aqua Drive comes with a unique feature that continuously displays the time remaining before the drive pays for itself - typical payback time is one-two years.

Sleep Mode: keeps pump wear and power consumption to an absolute minimum.

**65 kAIC
SCCR RATING**



STANDARD FEATURES

- **65kAIC SCCR Rating**
- **Pre-programmed dedicated features for water, wastewater, and irrigation applications**
- **Modular plug-and-play options facilitate flexibility in the field**
- **Hand-Off-Auto Switch and Speed Pot**
- **Metal handle & locking tab panel disconnect**
- **Finger safe covers**
- **Fan & filtered cooling with thumb screws for simple servicing**
- **On legs or wall mount installation**
- **Solid keypad cover extends keypad life**

STANDARD OPTIONS

- BASE UNIT
- LINE REACTOR
- TVSS
- DV/DT FILTER

MODULAR OPTIONS

- PUMP START RELAYS
- SET POINT SWITCH



POWERED BY DANFOSS FC 202

KEY FEATURES

True 208v coverage with dedicated single phase input line protects from line interruptions and transients.

Ground fault protection on both the supply side and motor side.

Integrated USB connectivity for remote commissioning and monitoring to load and save parameters and store alarm logs.

EMC/RFI filters and Dual DC-link reactors to reduce drive noise emissions and interference.

I/O expansion cards factory installed, or field configured.

Cascade Controller option for multi-pump connection.

Pipe fill mode closed-loop controls reduce water hammer to protect pipes and sprinkler heads.

Dry pump protection detects and triggers alarm, pump shutoff, or other pre-programmed action.

Motor alternation for controlling two pumps in duty/stand-by applications.

Back channel cooling standard on 150 hp and above.

SPECIFICATIONS

SURROUNDINGS/EXTERNAL

| | |
|---------------------|---|
| Outdoor enclosure | NEMA 3R steel enclosure is in addition to the NEMA 3R rated IPC |
| Ambient temperature | 14° F - 113° F (-10°C - 45°C). Higher temperatures can be achieved by derating the output amperage of the drive 10% for up to 122° F (50°C). |
| Relative humidity | Lower than 95% without condensation |
| Altitudes | At altitudes from 0 to 3300 feet (0 to 1000 meters) nameplate rated current is available. Derate for altitudes above 3300 feet (1000 meters) with a maximum operating altitude of 9900 feet (3000 meters). Consult factory for applications above 9900 feet (3000 meters) |

MAIN SUPPLY

| | |
|------------------|--|
| Supply voltage | 1 phase 200 V to 240 V 310% 3 phase 380 V to 480 V 310% 3 phase 200 V to 240 V 310% 3 phase 525 V to 600 V 310% |
| Supply frequency | 50/60 Hz, 32Hz |
| Output voltage | 0 to 100% of supply voltage |
| Input Supply | 5 - 600 hp wall mounted up to 125 hp, 12" legs included on 150 hp and larger |

FIELD BUS COMMUNICATION

| | |
|----------|-------------|
| Standard | Modbus® RTU |
|----------|-------------|

NEMA 3R CABINET SIZES

| Size | HP Range | Dimensions |
|---------------|--------------|-----------------------|
| 1 phase 230 V | 5 - 7.5 hp | 36" h x 30" w x 12" d |
| | 10 - 30 hp | 42" h x 36" w x 12" d |
| 1 phase 480 V | 5 - 10 hp | 36" h x 30" w x 12" d |
| | 15 - 50 hp | 42" h x 36" w x 12" d |
| 3 phase 230 V | 5 - 10 hp | 36" h x 30" w x 12" d |
| | 15 - 60 hp | 42" h x 36" w x 12" d |
| 3 phase 480 V | 5 - 25 hp | 36" h x 30" w x 12" d |
| | 30 - 125 hp | 42" h x 36" w x 12" d |
| | 150 - 250 hp | 84" h x 36" w x 16" d |
| | 300 - 450 hp | 72" h x 48" w x 18" d |
| | 500 - 600 hp | 84" h x 60" w x 24" d |

