



STANDARD FEATURES

- Time delayed automatic closing
- Auto-reset Overload protection
- Monitored battery back-up
- Low battery warning
- Programmable closing function selections
- Keyed test station
- Electronic thermal sensors (field installed)
- Continuous duty motor
- Detector/alarm input
- Adjustable linear driven limit switches
- 24-volt control Circuit
- 3-button open/close/stop control station
- NEMA 1 enclosures
- UL Listed

Model FDCL – Spur-Gear Drive Fire Door Motor Operator

For fire doors up to 150 sq. ft. and all counter fire doors in standard cycle applications

NOTE: *CONSULT FACTORY for availability on doors less than 4' wide or less than 20 sq. ft.*

- High efficiency spur-gear reducer
- Horizontal front of coil or wall mount
- Provides automatic closing without a loss of spring tension – eliminates the need for traditional mechanical reset
- Electronic thermal sensor, detector or alarm activation of motor controlled closing or internal release and brake controlled closing
- Provision for optional remote fusible link release connection
- 2 hour battery back-up with automatic closing prior to complete discharge of batteries
- Close on alarm feature to close door through motor operator upon activation by thermal sensor, detector or alarm – will activate warning device (if provided), and close door after selectable time delay. If obstruction is encountered, it will cycle upon contact and/or stop on the obstruction, internally release and continue to close when the obstruction is removed with the closing speed controlled through the brake (requires door be provided with a sensing edge)
- Automatic closing upon power loss prior to battery discharge - will activate devices (if provided), internally release and close door after selectable time delay with closing speed controlled by the brake. If an obstruction is encountered, the door will stop on the obstruction and continue to close after it is removed (requires door be provided with a sensing edge)
- Failsafe closing in the event of system failure – will internally release and close the door with controlled descent
- Auto-reset to restore normal operation of the door by activating open control after alarm is cleared/power is restored
- Motor – ½ HP Continuous-duty high-starting torque motor with instant reverse and overload protection
- Voltage – 115V, 230V-1PH/208-230V, 460V-3 PH

NOTE: *FDCL fire door motor operators do not have an auxiliary chain hoist or auxiliary release*

Per the requirements of UL Standard 325-2010, the door operator must be provided with an actuating device requiring constant pressure to close the door. As an alternative, the door may be provided with a device that will reverse the door upon contact with an obstruction during closing (Photo eyes OR sensing edge)

SPECIFICATIONS

OPERATOR SPECIFICATIONS

DRIVE SYSTEM

GEAR SYSTEM: Mixed Spurgear/Sprocket and Chain

CONTINUOUS POWER RATING:

1/2 HP: 140 ft-lbs/sec

OUTPUT SPEED

1/2 HP: 42.7 RPM

OUTPUT TORQUE

1/2 HP: 400 in-lbs.

OUTPUT SHAFT DIAMETER

1/2 HP: 1"

OUTPUT SPROCKET

1/2 HP: #50-18T

MAX. OVERHUNG LOAD:

1/2 HP: 375 lbs.

MAX. BACK DRIVING FORCE: (torque)

1/2 HP: 20 in-lbs.

CURRENT (Amperage):

Model FDCL5011U	Voltage-Phase	1/2HP
	115-1Ø, 60Hz	7.2
Model FDCL5021U	Voltage-Phase	1/2HP
	230-1Ø, 60Hz	3.6
Model FDCL5023U	Voltage-Phase	1/2HP
	230-3Ø, 60Hz	2
Model FDCL5043U	Voltage-Phase	1/2HP
	460-3Ø, 60Hz	1

MOTOR

TYPE: Continuous duty

HORSEPOWER: 1/2 HP

SPEED: 1750 RPM

VOLTAGE: 115/230 Single phase 230/460 Three Phase

ENCLOSURE: ODP NEMA 48 Base Mount

ELECTRICAL

TRANSFORMER: 1PH: 120/240 Vac 24 Vac

..... 3PH: 240/480 Vac 24 Vac

BATTERY BACKUP: (2) 12 Vdc .8AH Lead Acid

CONTROL STATION: 3-Button Station
OPEN/CLOSE/STOP

WIRING TYPE: C2 (Standard),
B2 (Optional with LMEP installed)

LIMIT ADJUST: Linear driven, fully adjustable
screw type cams. (60 rev. max @ limit shaft)

DUTY CYCLE: 25 Reversing cycles per hour

BRAKE: 24 Vdc Electromagnetic Disc

THERMAL SENSORS: 160° F (Open on rise manual
reset, see page 19)

FUSE: 250V, 3AG, 2 AMP Slow-Blow

