



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 FDC – In-line Gear Drive Fire Door *Motor Operator*

For fire doors up to 350 sq. ft. in standard cycle applications

NOTE: *CONSULT FACTORY for availability on doors less than 10' wide or less than 100 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
- 72 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 and 1 HP Continuous-duty high-starting torque motor with instant reverse and overload protection
- Voltage – 115V, 230V-1PH/208-230V, 460V-3 PH

NOTE: *FDC 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

DRIVE SYSTEM

GEAR REDUCERS: Helical inline, oil bath permanently lubricated, non-vented

CONTINUOUS POWER RATING:

1/2 HP: 175 ft-lbs/sec
1 HP: 275 ft-lbs/sec

RATIO:

1/2 HP: 48.8:1
1 HP: 49.8:1

OUTPUT SPEED:

1/2 HP: 36 RPM
1 HP: 35 RPM

OUTPUT TORQUE:

1/2 HP: 560 in-lbs.
1 HP: 900 in-lbs.

OUTPUT SHAFT DIAMETER:

1/2 HP: 1"
1 HP: 1-1/4"

OUTPUT SPROCKET:

1/2 HP: #50-14T
1 HP: #60-14T

MAX. OVERHUNG LOAD: (1" from output bearing face)

1/2 HP: 698 lbs.
1 HP: 1036 lbs.

MAX. BACK DRIVING FORCE: (torque)

1/2 HP: 100 in-lbs.
1 HP: 100 in-lbs.

MOTOR

TYPE: Continuous duty
HORSEPOWER: 1/2 HP and 1 HP
SPEED: 1725 RPM
VOLTAGE: 115/230 1 phase
230/460 3 Phase
ENCLOSURE: ODP NEMA 56c face mount

ELECTRICAL

TRANSFORMER: 1PH: 120/240 Vac 24 Vac
3PH: 240/480 Vac 24 Vac

BATTERY BACKUP: (2) 12Vdc 7AH sealed lead acid batteries

CONTROL STATION: NEMA1 3-Button Station
OPEN/CLOSE/STOP

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

LIMIT ADJUST: Linear driven, fully adjustable
screw type cams. (70 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 18)

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

CURRENT (Amperage):

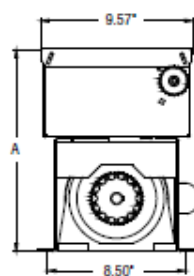
Model	Voltage-Phase	1/2 HP
FDC5011U	115-1Ø, 60Hz	11.2
FDC5021U	230-1Ø, 60Hz	5.6
FDC5023U	230-3Ø, 60Hz	3.1
FDC5043U	460-3Ø, 60Hz	1.75

Model	Voltage-Phase	1 HP
FDC1011U	115-1Ø, 60Hz	16
FDC1021U	230-1Ø, 60Hz	8
FDC1023U	230-3Ø, 60Hz	6
FDC1043U	460-3Ø, 60Hz	3

ITEM	DIMENSIONS	
	1/2HP	1HP
A	13.00"	14.38"
B	21.00"	25.73"
C	16.93"	16.31"
D	2.44"	2.93"
E	3.35"	3.94"
F	4.53"	5.61"
G	2.26"	2.80"
H	6.67"	7.22"
J	8.25"	7.50"
K	2.12"	2.51"

HANGING WEIGHT

1/2 HP = 80 lbs.
1 HP = 100 lbs.



MOUNTING DIMENSIONS

