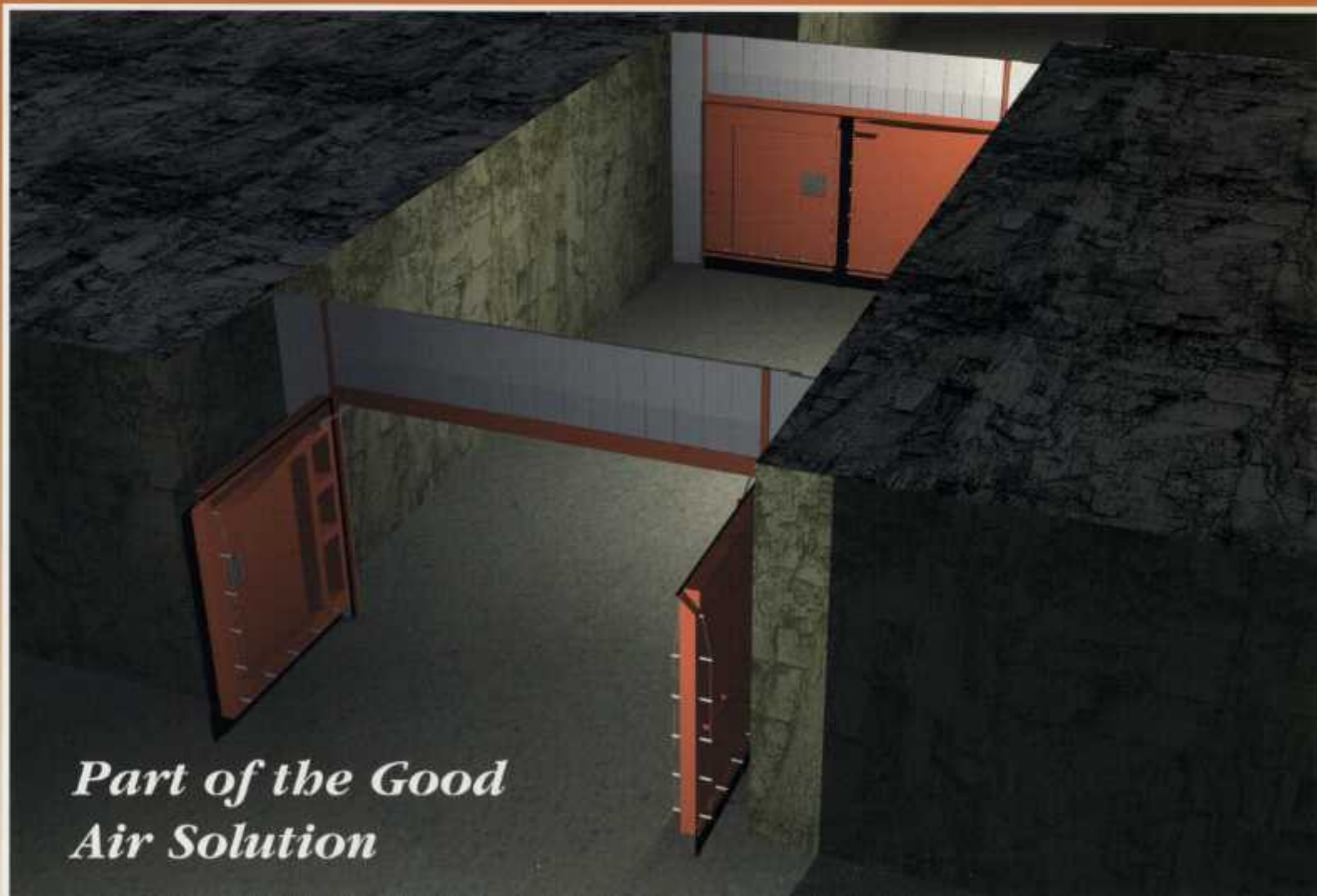




KENNEDY POWER MACHINE DOORS



*Part of the Good
Air Solution*

I N T R O D U C T I O N



The Kennedy Power Machine Door is the best product available to implement air locks to prevent loss of control of air in mines. It is designed for reliable operation through hundreds of thousands of cycles and years of use. Its unique features provide significant benefits that have made the Kennedy Door a mine industry standard of safety.

With proper care and maintenance, Kennedy Doors can last the life of your mine.



THE KENNEDY DOOR SOLUTION

Kennedy Power Doors are built to withstand the mine environment. The box style construction makes the door very stiff and strong. Doors are available to operate directly against up to 20 inches water gauge.

Because the doors are made with galvanized steel, corrosion is seldom a problem, even in very wet mines. Yielding columns and the floating lintel allow for roof convergence. The large rubber seal at the bottom of each

door eliminates the need for a threshold and allows for some floor heaving. The second closing door has an astragal seal. To allow for changing geometry of the opening, spring-mounted draw bars will close the doors tightly even with a door frame shift of several inches. Of course, the lintel and columns are designed to fit with Kennedy metal stoppings, or masonry materials, to make installation quick and easy.

The Kennedy Doors can be installed by a four-man crew in less than one shift.



POWER MACHINE DOOR CHOICES



Kennedy Power Machine Doors are available with hydraulic, pneumatic/electric control or pneumatic power including doors for use in return air. Standard doors are available in

heights from four to twenty feet and widths from seven to twenty-two feet, allowing passage for large mining machines.

Regardless of your requirements, whether hydraulic or pneumatic, Kennedy Doors set the industry standard for quality.

Power Options

Hydraulic

Pneumatic/Electric

Pneumatic



HYDRAULIC POWER MACHINE DOORS

The Kennedy Standard Hydraulic Machine Door has changed little on the outside from the first units built and has become the mine industry standard. Depending on the size of the door, they can open directly against 20 inches water gauge, or more. Available sizes range from up to 22 x 20 feet with 2, 3 and 5 horsepower units.

Kennedy Hydraulic Power Machine Doors feature several unique advantages:

- Yielding telescopic columns and floating lintel accommodate roof to floor convergence
- Special dynamic energy cushion that eliminates door shaking by absorbing inertia
- Specially designed alluvial cylinder mounting for tight closes
- Single hydraulic power unit air lock door set that operates two doors in an air lock and reduces cost
- Cylinder geometry that allows maximum force when breaking the air seal, maximum speed after starting and minimum obstruction of the open doorway
- Rain tight power disconnect mounted outside main control panel
- Column mounted power unit (2 hp only)
- Mobile, floor mounted power unit (2 hp, 3 hp & 5 hp only)
- Operator controlled or continuous run operation

Specifications

- Up to 20 IWG operating pressure differential
- Up to 20 IWG static pressure differential
- 2 hp, 3 hp & 5 hp power unit selection
- Single or 3 phase power
- Yielding columns accommodate roof to floor convergence
- Door leaves are a lightweight, high strength box construction design



PNEUMATIC POWER MACHINE DOORS

PNEUMATIC/ELECTRIC

Where a permissible unit is not required, we offer the pneumatic door with electrical control. This is less complex to install as the remote operations are carried out via a simple electrical cable, just like a hydraulic door. The air valve inside the control unit is shifted electrically.

Specifications

- Unit needs 40-150 psi clean, dry, operating air pressure
- 120 volts ac single phase electrical source required
- Yielding columns accommodate roof to floor convergence
- Door leaves are a lightweight, high strength box construction design
- Column mounted power unit

- Rain tight main power disconnect outside main power box

PNEUMATIC

The Kennedy Pneumatic Machine Door has two main advantages. First, in longwall or other operations where compressed air is available, the user doesn't have to maintain a hydraulic unit, which is a major consideration. Second is the advantage that a pneumatic unit can be put in return air, since it doesn't have any electrical/arc/spark hazard. These doors are usually faster in operation than their hydraulic counterparts. Kennedy Pneumatic Doors do not run out of control because of a special hydraulic checking circuit on the door that's function is only to check speed even

if the door becomes obstructed. Additionally, our doors operate directly against the ventilating air pressure, allowing very tight sealing that is augmented by the air load on the door.

Specifications

- Requires no electrical power to operate

- Unit needs 40-150 psi clean, dry, operating air pressure
- Yielding columns accommodate roof to floor convergence
- Door leaves are a lightweight, high strength box construction design
- Column mounted power unit



K E N N E D Y D O O R F E A T U R E S

THE COMPLETE DOOR PACKAGE

1. Yielding telescopic columns
2. Compact floating lintel
3. Specially designed alluvial cylinder mounting
4. Unique cylinder geometry for power, speed and clearance
5. Strong yet light leaves with exclusive Kennedy box section perimeter
6. Power unit built specifically for underground applications

Plus additional unique features



Installation

- Simple, straight forward design
- Quick connectors for hydraulic lines
- Hydraulically jacked columns
- Modular construction - only 6 components
- Non-technical assembly

Operation

- Rugged construction for mining environment
- Controlled opening and closing
- Both door leaves close with direction of air flow for positive seal
- Spring design provides squeeze on close (no slamming)
- Designed to operate and seal under significant misalignment



Maintenance

- Simplicity contributes to low maintenance
- Easy access to all components
- Few moving parts
- Simple hydraulic, electrical and/or pneumatic circuitry

Kennedy Door features respond to mine conditions with cost effective options.

SAFETY AND OPTIONAL FEATURES

Safety

For safety, there is a four foot escape door in every unit. This escape door has a window with embedded wire safety glass so lights, fire or smoke on the other side of the door can be



seen. Also, the doors have manual release valves that can be actuated to allow manual operation of the doors in case of power failure.

- Window
- 4' x 5' emergency escapeway man door
- Reflective decals outlining doors and opening
- Consistent, user controlled operation through entire motion cycle on operator controlled models
- Door edge safety cable with

special self-checking circuitry for continuous run models

- Manual release valves for operation during power failure

Continuous Run Option

Kennedy Power Doors are available with a continuous run option that allows a complete opening or closing cycle with one touch of a button. Each door is encircled by a safety cable; pushing on or pulling the cable will stop both doors. Also, the sensor for the safety cable will stop the doors if the conductors to the switch are either open or shorted. If the doors fail to complete their opening or closing cycle within a predetermined time, a light comes on and the pump will stop, preventing pump overheating or other damage in case of low oil or other problem.

Operation Options

Kennedy Power Doors can be operated by rib-mounted or pendant buttons, by slap switches, pull cord switches, or by cap lamp actuated photocell sensors.

Control Options

Operator and continuous run control options available for Kennedy Doors include:

Operator Control

1. Double Push Button
2. Double Pull Cord
3. Double Button Radio

Continuous Run

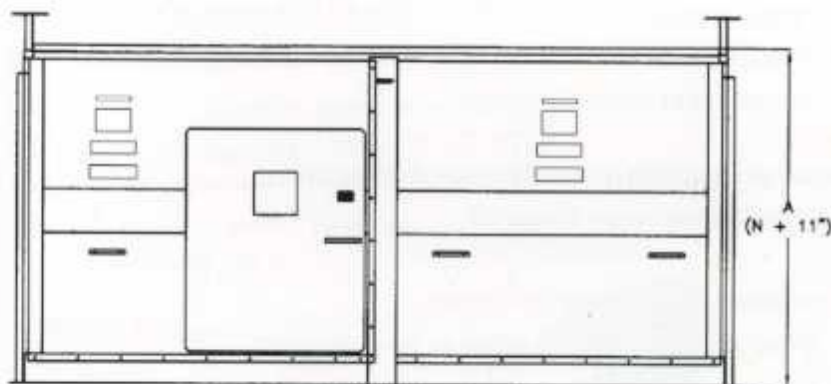
1. Single Push Button
2. Single Pull Cord
3. Single Slap Switch
4. Single Photocell
5. Single Button Radio
6. Double Push Button
7. Double Pull Cord
8. Double Slap Switch
9. Double Photocell
10. Double Button Radio

Note 1: All single controls open the door if closed and close the door if open.

Note 2: All double controls have two devices on each side of each door, one for open and one for close.

Note 3: One button radio controls are available that allow a single transmitter to open and close one door with single controls. Two button radio transmitters are available that allow a single transmitter to open and close a single door with double controls, or two doors with single controls. Four button radio transmitters are available that allow a single transmitter to operate two doors with double controls, or up to four doors with single controls.

POWER MACHINE DOOR INSTALLATION CLEARANCES



FRONT VIEW
(DOORS CLOSED)

WIDTH CLEARANCES					
NOMINAL DOOR WIDTH					
DIMENSION	12'	14'	16'	18'	20'
C	12'	14'	16'	18'	20'
D	13' 1"	15' 1"	17' 1"	19' 1"	21' 1"
F	12' 2"	14' 2"	16' 2"	18' 2"	20' 2"

LENGTH CLEARANCES					
NOMINAL DOOR WIDTH					
DIMENSION	12'	14'	16'	18'	20'
E	9' 7"	10' 7"	11' 7"	12' 7"	13' 7"

NOTE IF THE POWER MACHINE DOOR IS EQUIPPED WITH A COLUMN MOUNTED POWER UNIT, ADD THE FOLLOWING MEASUREMENTS:

ADD +10 1/2" TO DIMENSION D
ADD + 11" TO DIMENSION E

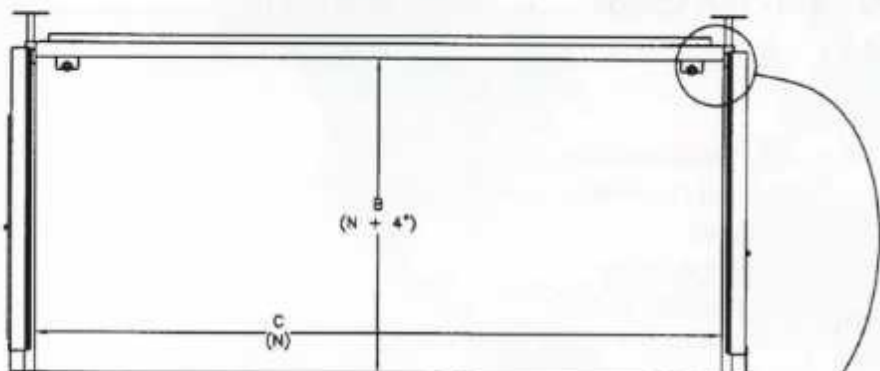
NOTE N = NOMINAL DOOR MEASUREMENT

HEIGHT CLEARANCES					
NOMINAL DOOR HEIGHT					
DIMENSION	4'	5'	6'	7'	8'
A	4' 11"	5' 11"	6' 11"	7' 11"	8' 11"
B	4' 4"	5' 4"	6' 4"	7' 4"	8' 4"

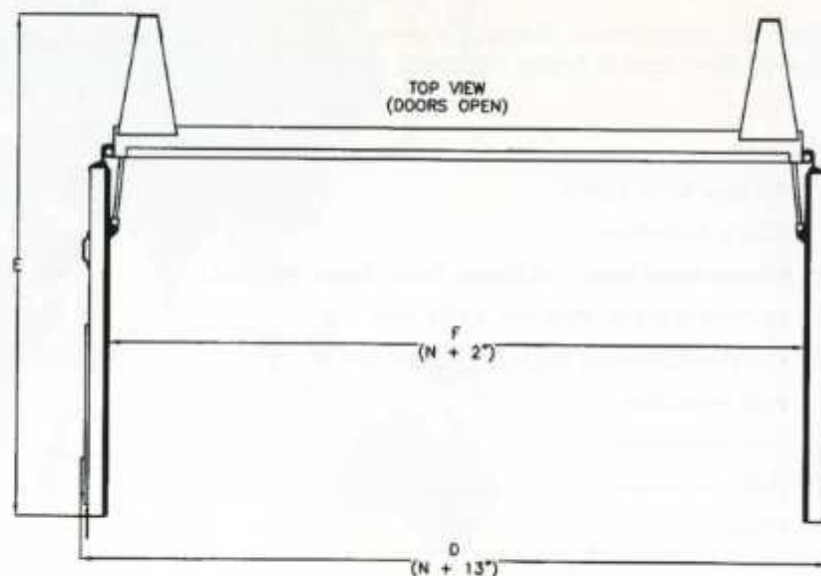
NOMINAL DOOR HEIGHT					
DIMENSION	9'	10'	11'	12'	13'
A	9' 11"	10' 11"	11' 11"	12' 11"	13' 11"
B	9' 4"	10' 4"	11' 4"	12' 4"	13' 4"

NOMINAL DOOR HEIGHT					
DIMENSION	14'	15'	16'	17'	18'
A	14' 11"	15' 11"	16' 11"	17' 11"	18' 11"
B	14' 4"	15' 4"	16' 4"	17' 4"	18' 4"

NOMINAL DOOR HEIGHT		
DIMENSION	19'	20'
A	19' 11"	20' 11"
B	19' 4"	20' 4"



FRONT VIEW
(DOORS OPEN)



TOP VIEW
(DOORS OPEN)

ORDER INFORMATION

Kennedy Metal Products Power Machine Door

Customer _____

Date of Request _____

Delivery Date Requested _____

Quantity _____

Basic Door Opening Size _____

Has Opening at Point of Installation

Been Measured? ☐ Yes ☐ No

By Whom? _____

(Refer to installation clearance dimension drawing to insure correct door size is being ordered)

Options:

- ☐ Trolley Wire Lintel _____
- ☐ Block Adaptors _____
- ☐ Continuous Run *(includes Door Edge Safeties)* _____
- ☐ Special Voltage Package *(575 Volt, etc.)* _____
- ☐ Interlock Switch Package for Air Lock _____
- ☐ Pull Switches _____
- ☐ Slap Switches _____
- ☐ Palm Buttons _____
- ☐ Photocells _____

Units for use in extreme temperature conditions or requiring special fluids or other variances will be quoted on an individual basis.

AC Voltage? _____ Phase? _____

Type Hyd. Fluid?

- ☐ Water Glycol ☐ Mineral Oil
- ☐ Phosphate Ester ☐ Other _____
- ☐ Hulsafe 600 Invert Emulsion

Maximum Air Differential Pressure Anticipated _____

Ambient Temperature Range of _____ °F to _____ °F

Lead Time From Date of Order:

Firm lead time will be given at time of order.

Date Order Placed _____

Delivery Date Quoted _____

Items Not Supplied with Doors:

Bulkhead (Stopping) Surrounding Door
Threshold
Installation Labor
Power Supply to Unit
Remote Control Switches & Wiring
Site Related Materials - Concrete, Roof (Floor)
Bolts, Sealing Materials, etc.

See "Kennedy Power Machine Door Sales Features" Listing for details of standard and optional features.



Jack Kennedy Metal Products & Buildings, Inc.
P.O. Box 138
Taylorville, IL 62568

KENNEDY WORLDWIDE

Kennedy Metal Products has been working to make mining safer and more productive for decades. We are recognized experts in mining ventilation with plants and warehouses on four continents.





Jack Kennedy Metal Products & Buildings, Inc.

FOR THE BEST VENTILATION USE THE COMPLETE KENNEDY SYSTEM...STOPPINGS, DOORS & OVERCASTS

- Steel Stoppings
- NZL (near zero leak) Stoppings
- Overcasts
- Undercasts
- Over 200 Models of Man Doors
- Concussion Relief Doors
- Manual Regulators
- Power Regulators
- Automatic Regulating Systems
- Rescuer Boxes
- Roof Brackets
- Conveyor Belt Slip and Sequence Switches
- Belt Crossings



READ THIS NOTICE

The seller makes no warranty of any kind whatsoever, expressed or implied; and all implied warranties of merchantability and fitness for a particular purpose are hereby disclaimed by seller and excluded from this agreement. Seller hereby disclaims any liability for any other or consequential damages which might occur from failure of the product to perform as herein stated.

PATENT INFORMATION

These products are covered by one or more United States or Foreign Patents, granted or pending.

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