

# **Section B1**

# This Price Schedule is effective January 10, 2022.

# **Industrial Operators**

Date	Page	Comment
1-10-22	All	January, 2022 Price Schedule update.
2-23-22	19	Corrected part number on tandem V-wheel assembly.
2-25-22	7,9,17	Price adjustment 9200-135, 9550-205, 9550-206.
8-1-22	All	Entire Section B1 revised. Price adjustment on all 92xx operators. Removed all 95xx operators which have been relocated to Section C1.

# **Industrial Gate Operators**

9200 series operators are designed to operate vehicular sliding gates used in Limited (Class III) and Restricted (Class IV) industrial applications only. These operators must never be used in Residential (Class I) or Commercial (Class II) applications, or in any application where the gate is operated by the General Public.

These operators must be installed with external entrapment prevention devices, Type B1 (non-contact) or Type B2 (contact), or a combination of both to insure all entrapment hazard areas are protected. **9200 Series operators require a minimum of one (1) Type B1 AND one (1) Type B2 in EACH direction of travel.** Refer to the Installation Manual for important safety information.

# **Minimum Gate Length**

Most 9200 series operators have variable speed capability which allows the user to adjust the speed of the gate. On most operators, the speed can be set for speeds up to 2 Ft/sec., and on certain models the gate speed can be set up to 4 Ft/sec. When using these higher speeds, there is a time factor to consider during the start-up and the slow-down of the gate. For this reason, you will see a minimum gate length on operators design to move a gate at the higher speeds.

# UL 325 – August 2018 Update

Requirements mandated by the safety standard (UL 325) that DKS gate operators are listed to require that photo-beams and contact edges used for entrapment protection must be monitored. Entrapment protection must be provided for the gate system where the risk of entrapment exist. The gate operator will not run without one or more external entrapment protection devices installed in each direction of travel. Check the gate operator installation manual for a list of external entrapment protection devices that can be used with DKS gate operator products.

The August, 2018 update to the safety standard requires that a minimum of two independent means of entrapment protection must be provided, <u>in each direction of travel</u>, where the risk of entrapment exists. The actual number of external devices required is dependent on the gate system layout and the number of entrapment areas that will need to be protected. Installers will have to identify all potential areas where the risk of entrapment exist and how best to protect those areas. For example, some gates may require two (or more) external devices in each direction of travel to protect all potential areas of entrapment. **9500 Series operators require a minimum of one (1) Type B1 AND one (1) Type B2 in EACH direction of travel.** 

There is an exception for swing gates and vertical lift gates regarding the minimum of two entrapment protection devices in each direction of travel. For example, if on a swing gate system there is no potential for entrapment in the opening direction, then only the close direction will require a minimum of two means of entrapment protection. Installers will have to determine if any entrapment hazards exist in the opening direction, and if so, then those areas will have to be protected with external devices.

Vertical lift gates require two means of entrapment protection in the down cycle, but will only require one means of entrapment protection in the up cycle. The model 1175 is considered to be a vertical lift gate operator for entrapment protection means requirements.

Barrier gate operators that are installed in such a way that the barrier arm does not come closer than 16 inches to a rigid object are not required to protect against entrapment.

The table below shows the <u>minimum</u> entrapment protection requirements for each type of gate operator in the scope of the UL 325 Standard for Safety.

	Opening	Closing
Horizontal Slide Gate	2	2
Horizontal Swing Gate	2*	2*
Vertical Pivot Gate	2	2
Vertical Lift gate	1	2

\* For a horizontal swing gate operator, at least two independent entrapment protection means are required in each direction of travel. Except, if there is no entrapment zone in one direction of travel, only one means of entrapment protection is required in that direction of travel; however, the other direction must have two independent entrapment protection means.

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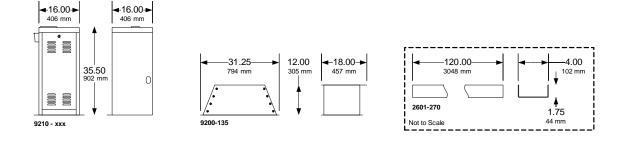
# 9210 Slide Gate Operator

### Heavy-Duty Slide Gate Operator

#### 9210

- Adjustable Limits
- Plug-in Loop Detector Ports
- Built-in power and reset switches
- Two 115 VAC convenience outlets
- Partial open / anti-tailgate feature

- 30:1 Gear Reducer Drive Train
- Fixed Speed
- 20-Feet (6m) #50 / #60 Chain
- Gate tracker data output
- Selectable stop/ reverse function



Model	Chain	Speed Fixed	Maximum Gate Weight	Maximum Gate Length	Minimum Gate Length	Mount	Class of Operation <sup>1</sup>	Voltage VAC	HP	Power Outlets	Loop Ports <sup>2</sup>
9210	#50	1 Ft/sec	2000 Lbs <sup>3</sup> 907 Kg	100 Ft	10 Ft	Pad or		115	1	2	2
9210	#60	.3m/sec	3000 Lbs <sup>3</sup> 1360 Kg	30m	3m	Pedestal <sup>3</sup>	III, IV	208, 230, 460	Ţ	2	2

1. III = Limited Access; IV = Restricted Access

2. Plug-in loop detector ports; open and reverse. DoorKing plug-in loop detectors only.

3. Use of 2601-270 chain tray requires 9200-135 pedestal.

## 9210 Slide Gate Operator

# **Heavy-Duty Slide Gate Operator**

#### Operators w/#50 Chain

9210-380 1 HP, 115V (9.7A)	. 6,477.00
9210-382 1 HP, 208V 1 <sup>ø</sup> (5.0A)	. 6,549.00
9210-384 1 HP, 230V 1 <sup>ø</sup> (4.9A)	. 6,549.00
9210-386 1 HP, 208V 3 <sup>ø</sup> (3.4A)	. 6,834.50
9210-388 1 HP, 230V 3 <sup>ø</sup> (3.3A)	. 6,834.50
9210-390 1 HP, 460V 3 <sup>ø</sup> (1.7A)	. 6,834.50

#### Operators w/#60 Chain

9210-381 1 HP, 115V (9.7A)	6,579.00
9210-383 1 HP, 208V 1 <sup>ø</sup> (5.0A)	6,657.00
9210-385 1 HP, 230V 1 <sup>ø</sup> (4.9A)	6,657.00
9210-387 1 HP, 208V 3 <sup>ø</sup> (3.4A)	6,945.00
9210-389 1 HP, 230V 3 <sup>ø</sup> (3.3A)	6,945.00
9210-391 1 HP, 460V 3 <sup>ø</sup> (1.7A)	6,945.00

#### **Choose Entrapment Protection (required) Devices**

Use Type B1 (non-contact) and/or Type B2 (contact) entrapment protection devices to protect all areas where the risk of entrapment exist - see Section A1, pages 46-47.

Operator will not run without external entrapment protection devices connected to the controller board. Minimum of two (one in each direction of travel) is required. See installation manual for more information.

#### Loops and Loop Detectors

See Section A1, page 48 for a complete list of all loop detectors, prefabricated loops and loop accessories available.

#### Accessories

9200-135 Mounting Pedestal	.1350.00
2601-270 Chain Tray Kit 10 Ft (3m) <sup>1</sup>	484.50
1601-195 Heater Kit 120 VAC <sup>2</sup>	922.50
1601-197 Heater Kit 208/230 VAC <sup>2</sup>	Note 3
1601-198 Heater Kit 460 VAC <sup>2</sup>	Note 3
1. 9200-135 required if chain tray is used.	
2. Use if temperature routinely falls below 10°F (-12°C).	
3. See Section A1, page 41 for pricing.	

#### Chain

2600-485 #50 Chain, 20-Ft (6 m)19	98.00
2600-448 #60 Chain, 20-Ft (6 m)	8.00

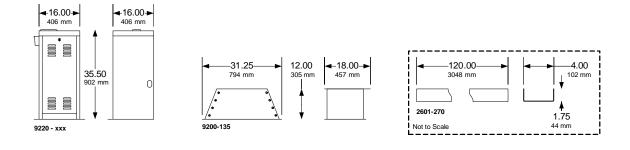
# 9220 Slide Gate Operator

### **Maximum Security Slide Gate Operator**

#### 9220

- Adjustable Limits
- Plug-in Loop Detector Ports
- Built-in power and reset switches
- Two 115 VAC convenience outlets
- Partial open / anti-tailgate feature

- 30:1 Gear Reducer Drive Train
- Variable Speed
- 20-Feet (6m) #60 Chain
- Gate tracker data output
- Selectable stop/ reverse function



Model	Chain	Speed Variable	Maximum Gate Weight	Maximum Gate Length	Minimum Gate Length	Mount	Class of Operation <sup>1</sup>	Voltage VAC	HP	Power Outlets	Loop Ports <sup>2</sup>
9220	#60	1-2 Ft/sec .36m/sec	2000 Lbs <sup>3</sup> 907 Kg	100 Ft 30m	20 Ft 6m	Pad or Pedestal <sup>3</sup>	III, IV	208, 230, 460	2	2	2

1. III = Limited Access; IV = Restricted Access

2. Plug-in loop detector ports; open and reverse. DoorKing plug-in loop detectors only.

3. Requires 9200-135 pedestal.

#### Operators

9220-381 2 HP, 208V 1 <sup>ø</sup> (11.7A)	8,019.00
9220-383 2 HP, 230V 1 <sup>ø</sup> (11.5A)	8,019.00
9220-385 2 HP, 208V 3 <sup>ø</sup> (6.6A)	8,304.00
9220-387 2 HP, 230V 3 <sup>ø</sup> (6.2A)	8,304.00
9220-389 2 HP, 460V 3 <sup>ø</sup> (3.1A)	8,304.00

#### **Choose Entrapment Protection (required) Devices**

Use Type B1 (non-contact) and/or Type B2 (contact) entrapment protection devices to protect all areas where the risk of entrapment exist - see Section A1, pages 46-47.

Operator will not run without external entrapment protection devices connected to the controller board. Minimum of two (one in each direction of travel) is required. See installation manual for more information.

#### Loops and Loop Detectors

See Section A1, page 48 for a complete list of all loop detectors, prefabricated loops and loop accessories available.

# **Maximum Security Slide Gate Operator**

#### Accessories

9200-135 Mounting Pedestal <sup>1</sup>	1350.00
2601-270 Chain Tray Kit 10 Ft (3m)	484.50
1601-197 Heater Kit 208/230 VAC <sup>2</sup>	Note 2
1601-198 Heater Kit 480 VAC <sup>2</sup>	Note 2
1. 9200-135 required if chain tray is used.	
2. Use if temperature routinely falls below 10°F (-12°C). A1, page 41 for pricing.	See Section

#### Chain

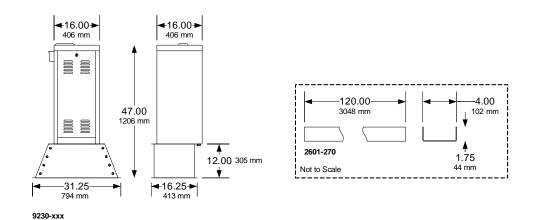
# 9230 Slide Gate Operator

### **Maximum Security Slide Gate Operator**

#### 9230

- Adjustable Limits
- Plug-in Loop Detector Ports
- Built-in power and reset switches
- Two 115 VAC convenience outlets
- Partial open / anti-tailgate feature

- 30:1 Gear Reducer Drive Train
- Variable Speed
- 20-Feet (6m) #60 Chain
- Gate tracker data output
- Selectable stop/ reverse function



Maximum Gate Weight Minimum Gate Length Model Chain Speed Variable Maximum Mount Voltage VAC Power Outlets Class of Loop HP Gate Length Operation<sup>1</sup> Ports<sup>2</sup> 1-2 Ft/sec 5000 Lbs<sup>3</sup> 100 Ft 20 Ft 208, 230, 9230 3 2 #60 Pedestal<sup>3</sup> III, IV 2 .3-.6m/sec 2267 Kg 30m 6m 460

1. III = Limited Access; IV = Restricted Access

2. Plug-in loop detector ports; open and reverse. DoorKing plug-in loop detectors only.

3. 9200-135 pedestal included.

#### Operators

9230-380 3 HP, 208V 3 <sup>ø</sup> (9.8A)	11,565.00
9230-381 3 HP, 230V 3 <sup>ø</sup> (9.6A)	11,565.00
9230-382 3 HP, 460V 3¢ (4.9A)	11,565.00

#### **Choose Entrapment Protection (required) Devices**

Use Type B1 (non-contact) and/or Type B2 (contact) entrapment protection devices to protect all areas where the risk of entrapment exist - see Section A1, pages 46-47.

Operator will not run without external entrapment protection devices connected to the controller board. Minimum of two (one in each direction of travel) is required. See installation manual for more information.

#### Loops and Loop Detectors

See Section A1, page 48 for a complete list of all loop detectors, prefabricated loops and loop accessories available.

# **Maximum Security Slide Gate Operator**

#### Accessories

2601-270 Chain Tray Kit 10 Ft (3m)	
1601-197 Heater Kit 208/230 VAC <sup>1</sup>	Note 2
1601-198 Heater Kit 480 VAC <sup>1</sup>	Note 2
1. Use if temperature routinely falls below 10°F (-12°C). A1, page 41 for pricing.	See Section

#### Chain

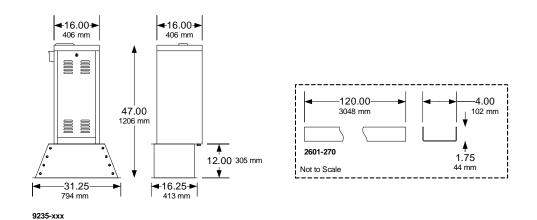
# 9235 Slide Gate Operator

### **Maximum Security Slide Gate Operator**

#### 9235

- Adjustable Limits
- Plug-in Loop Detector Ports
- Built-in power and reset switches
- Two 115 VAC convenience outlets
- Partial open / anti-tailgate feature

- 10:1 Gear Reducer Drive Train
- Variable Speed
- 20-Feet (6m) #60 Chain
- Gate tracker data output
- Selectable stop/ reverse function



Maximum Gate Weight Minimum Gate Length Model Chain Speed Variable Maximum Mount Voltage VAC Power Outlets Class of Loop HP Gate Length Operation<sup>1</sup> Ports<sup>2</sup> 1-4 Ft/sec 3000 Lbs<sup>3</sup> 100 Ft 30 Ft 208, 230, 9235 Pedestal<sup>3</sup> 3 2 #60 III, IV 2 .3-1.2m/sec 1360 Kg 30m 9m 460

1. III = Limited Access; IV = Restricted Access

2. Plug-in loop detector ports; open and reverse. DoorKing plug-in loop detectors only.

3. 9200-135 pedestal included.

#### Operators

9235-380 3 HP, 208V 3 <sup>ø</sup> (12.8A)	17,229.00
9235-381 3 HP, 230V 3 <sup>ø</sup> (12.6A)	. 17,229.00
9235-382 3 HP, 460V 3 <sup>ø</sup> (6.3A)	. 17,229.00

#### **Choose Entrapment Protection (required) Devices**

Use Type B1 (non-contact) and/or Type B2 (contact) entrapment protection devices to protect all areas where the risk of entrapment exist - see Section A1, pages 46-47.

Operator will not run without external entrapment protection devices connected to the controller board. Minimum of two (one in each direction of travel) is required. See installation manual for more information.

#### Loops and Loop Detectors

See Section A1, page 48 for a complete list of all loop detectors, prefabricated loops and loop accessories available.

# **Maximum Security Slide Gate Operator**

#### Accessories

2601-270 Chain Tray Kit 10 Ft (3m)	484.50
1601-197 Heater Kit 208/230 VAC <sup>1</sup>	Note 2
1601-198 Heater Kit 480 VAC <sup>1</sup>	Note 2
1. Use if temperature routinely falls below 10°F (-12°C). S A1, page 41 for pricing.	ee Section

#### Chain

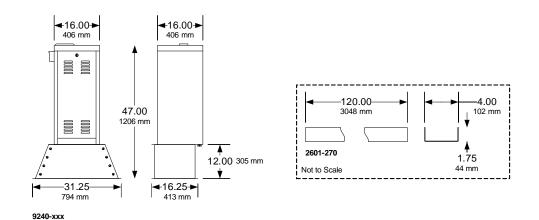
# 9240 Slide Gate Operator

### **Maximum Security Slide Gate Operator**

#### 9240

- Adjustable Limits
- Plug-in Loop Detector Ports
- Built-in power and reset switches
- Two 115 VAC convenience outlets
- Partial open / anti-tailgate feature

- 30:1 Gear Reducer Drive Train
- Variable Speed
- 20-Feet (6m) #80 Chain
- Gate tracker data output
- Selectable stop/ reverse function



Model	Chain	Speed Variable	Maximum Gate Weight	Maximum Gate Length	Minimum Gate Length	Mount	Class of Operation <sup>1</sup>	Voltage VAC	HP	Power Outlets	Loop Ports <sup>2</sup>
9240	#80	1-2 Ft/sec .36m/sec	8000 Lbs <sup>3</sup> 3628 Kg	100 Ft 30m	25 Ft 7.6m	Pedestal <sup>3</sup>	III, IV	208, 230, 460	3	2	2

1. III = Limited Access; IV = Restricted Access

2. Plug-in loop detector ports; open and reverse. DoorKing plug-in loop detectors only.

3. 9200-135 pedestal included.

#### Operators

9240-380 3 HP, 208V 3 <sup>ø</sup> (12.8A)	. 17,229.00
9240-381 3 HP, 230V 3 <sup>ø</sup> (12.6A)	. 17,229.00
9240-382 3 HP, 460V 3 <sup>ø</sup> (6.3A)	. 17,229.00

#### **Choose Entrapment Protection (required) Devices**

Use Type B1 (non-contact) and/or Type B2 (contact) entrapment protection devices to protect all areas where the risk of entrapment exist - see Section A1, pages 46-47.

Operator will not run without external entrapment protection devices connected to the controller board. Minimum of two (one in each direction of travel) is required. See installation manual for more information.

#### Loops and Loop Detectors

See Section A1, page 48 for a complete list of all loop detectors, prefabricated loops and loop accessories available.

# **Maximum Security Slide Gate Operator**

#### Accessories

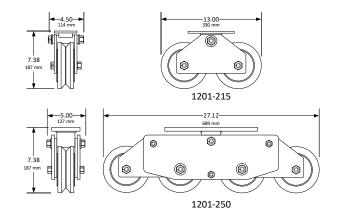
2601-270 Chain Tray Kit 10 Ft (3m)	484.50
1601-197 Heater Kit 208/230 VAC <sup>1</sup>	Note 2
1601-198 Heater Kit 480 VAC <sup>1</sup>	Note 2
1. Use if temperature routinely falls below 10°F (-12°C). A1, page 41 for pricing.	See Section

#### Chain

# **Slide Gate Accessories**

### **Heavy-Duty V-Wheel Assemblies**

The tandem and quad wheel assemblies are designed for extremely heavy gates. The tandem and quad assemblies distribute the gate weight across a wider area of the gate track. A critical component of these very heavy gates is the track that the gate rolls on. The track must be of a hardened material capable of supporting these extreme weights.



#### Heavy-Duty V-Wheel Assemblies

# 6-Inch (152 mm) Heavy-Duty Tandem V-Wheel Assembly

1201-215 Steel w/sealed bearings......787.50

 Assembly is rated for 7,000 lb (3,175 Kg). Maximum gate weight is 14,000 lb (6,350 Kg) - two (2) assemblies required per gate. With this configuration, each wheel (4 total) is supporting 3,500 lb (1,587 Kg).

#### 6-Inch (152 mm) Heavy-Duty Quad V-Wheel Assembly 1201-250 ......2,287.50

 Assembly is rated for 14,000 lb (6,350 Kg). Maximum gate weight is 28,000 lb (12,700 Kg) - two (2) assemblies required per gate. With this configuration, each wheel (8 total) is supporting 3,500 lb (1,587 Kg).

#### Heavy-Duty Replacement V-Wheel

#### 6-Inch (152 mm) Heavy-Duty Replacement V-Wheel

• 3500 Lb. (1587 Kg) maximum weight