

# **Section B1**

# **Product Reference Guide - January 2026**

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# **Industrial Operators**

Date	Dage	Comment
	Page	
1-1-26	All	Reference guide published.

### **Industrial Gate Operators**

6550 series and 9200 series operators are designed to operate vehicular sliding and swinging 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 ensure all entrapment hazard areas are protected. **9200 Series operators require a minimum of one (1) Type B1 or B2 AND one (1) Type B1 or 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 higher speeds.

### **UL 325 - February 2023**

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 exists. 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, in each direction of travel, 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 exists 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 or B2 AND one (1) Type B1 or 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. 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
Horizontal Bifold Gate	2	2

<sup>\*</sup> 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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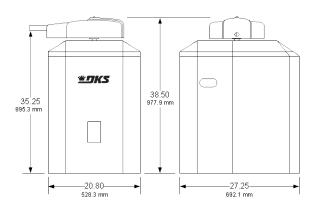
6550 Series	
Slide Gate Operators	
Model 9210	
Model 9220	
Model 9230	1
Model 9235	14
Model 9240	10
Model 9245	19

# **6550 Swing Gate Operators**

# **Adjustable Limit Swing Gate Operators**

- Adjustable Magnetic Limits
- Type A inherent reverse system
- Plug-in Loop Detector Ports
- Gate Tracker Data Output
- Built-in power and reset switches

- 14 ga. Galvanized steel cover
- Galvanized steel frame
- Opens gate 90° in approximately 16 sec.
- Magnetic lock output
- Overlap feature for bi-parting gates



Mod	l Maximum Gate Weight	Maximum Gate Length	Mount	Class of Operation <sup>1</sup>	Voltage <sup>2</sup>	HP	Power Outlets	Maximum Cycles / Day	Loop Ports <sup>2</sup>	Adjustable Clutch
655	2000 Lbs 907 KG	25 Ft 7.62 m	Pad	III, IV	115 208 230 460 575 VAC	1	2	Continuous	2	No

- 1. III = Limited Access; IV = Restricted Access
- 2. High voltage kit (P/N 2600-266) required for 208 Volt and higher.
- 3. Plug-in loop detector ports; open and reverse. DoorKing plug-in loop detectors only.

# **6550 Swing Gate Operators**

# **Adjustable Limit Swing Gate Operators**

#### **Operators Fixed Speed**

6550-380 Primary 1 HP

6550-384 Secondary 1 HP

Secondary operator includes 50 feet (15.2 m) of interconnection cable.

#### **High Voltage Kit**

2600-266......Note 1

1. See Section A1, page 29.

Allows the operator to be powered from 208, 230, 460 or 575 VAC source voltage. In dual gate applications, only one (1) kit is required. Not available on 6555-081 operator.

#### Step 2: 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 pages 46 – 47.

Operator will not run without entrapment protection device(s) connected to the controller board. See installation manual for more information.

### **Loops and Loop Detectors**

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

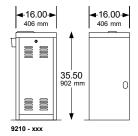
#### **Backup Power Inverters**

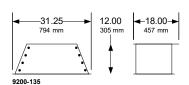
1000-083 1000-Watt, Pure Sine Wave Note	1
1000-045 Inverter Post Mount Kit Note	1
See Section A1 page 50.	

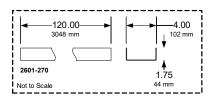
### **Heavy-Duty Slide Gate Operator**

- 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	III, IV	115 208, 230,	1	2	2
9210	#60	.3m/sec	3000 Lbs <sup>3</sup> 1360 Kg	30m	3m	Pedestal <sup>3</sup>	111, 17	460	1	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) 9210-382 1 HP, 208V 1<sup>Ø</sup> (5.0A) 9210-384 1 HP, 230V 1<sup>Ø</sup> (4.9A) 9210-386 1 HP, 208V 3<sup>Ø</sup> (3.4A) 9210-388 1 HP, 230V 3<sup>Ø</sup> (3.3A) 9210-390 1 HP, 460V 3<sup>Ø</sup> (1.7A)

#### Operators w/#60 Chain

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

#### **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
2601-270 Chain Tray Kit 10 Ft (3m)<sup>1</sup>
1601-195 Heater Kit 120 VAC<sup>2</sup>
1601-197 Heater Kit 208/230 VAC<sup>2</sup>
1601-198 Heater Kit 460 VAC<sup>2</sup>
1. 9200-135 required if chain tray is used.
2. Use if temperature routinely falls below 10°F (-12°C).

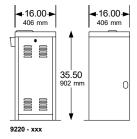
#### Chain

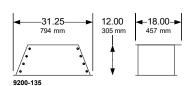
2600-485 #50 Chain, 20-Ft (6 m) 2600-448 #60 Chain, 20-Ft (6 m)

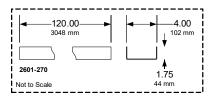
# **Maximum Security Slide Gate Operator**

- 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.

# 9220 Slide Gate Operator

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

#### Operators

9220-381 2 HP, 208V 1<sup>ø</sup> (11.7A)

9220-383 2 HP, 230V 1<sup>ø</sup> (11.5A)

9220-385 2 HP, 208V 3<sup>Ø</sup> (6.6A)

9220-387 2 HP, 230V 3<sup>ø</sup> (6.2A)

9220-389 2 HP, 460V 3<sup>Ø</sup> (3.1A)

#### **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

2601-270 Chain Tray Kit 10 Ft (3m)1

1601-197 Heater Kit 208/230 VAC<sup>2</sup>

1601-198 Heater Kit 480 VAC<sup>2</sup>

1. 9200-135 required if chain tray is used.

2. Use if temperature routinely falls below 10°F (-12°C).

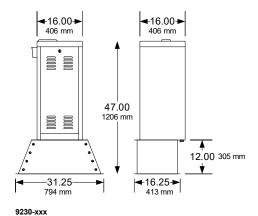
#### Chain

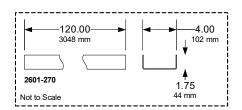
2600-448 #60 Chain, 20-Ft (6 m)

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

- 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>
9230	#60	1-2 Ft/sec .36m/sec	5000 Lbs <sup>3</sup> 2267 Kg	100 Ft 30m	20 Ft 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.
- 9200-135 pedestal included.

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

#### Operators

9230-380 3 HP, 208V 3<sup>ø</sup> (9.8A) 9230-381 3 HP, 230V 3<sup>ø</sup> (9.6A)

9230-382 3 HP, 460V 3<sup>Ø</sup> (4.9A)

### **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

2601-270 Chain Tray Kit 10 Ft (3m) 1601-197 Heater Kit 208/230 VAC<sup>1</sup> 1601-198 Heater Kit 480 VAC<sup>1</sup> 1. Use if temperature routinely falls below 10°F (-12°C).

#### Chain

2600-448 #60 Chain, 20-Ft (6 m)

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

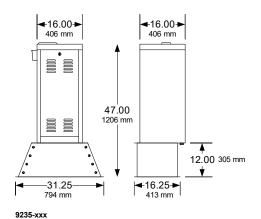
#### 9235

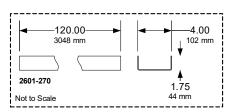
- Adjustable Limits
- Plug-in Loop Detector Ports
- Built-in power and reset switches
- Two 115 VAC convenience outlets
- Partial open / anti-tailgate feature

Electric BrakeVariable Speed/High Speed

10:1 Gear Reducer Drive Train

- 20-Feet (6m) #60 Chain
- Gate tracker data output
- Selectable stop/ reverse function





Mode	l 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>
9235	#60	1-4 Ft/sec .3-1.2m/sec	3000 Lbs <sup>3</sup> 1360 Kg	100 Ft 30m	30 Ft 9m	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.

# 9235 Slide Gate Operator

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

#### Operators

9235-380 3 HP, 208V 3<sup>ø</sup> (12.8A) 9235-381 3 HP, 230V 3<sup>ø</sup> (12.6A)

9235-382 3 HP, 460V 3<sup>Ø</sup> (6.3A)

### **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

2601-270 Chain Tray Kit 10 Ft (3m)

1601-197 Heater Kit 208/230 VAC<sup>1</sup>

1601-198 Heater Kit 480 VAC1

1. Use if temperature routinely falls below 10°F (-12°C).

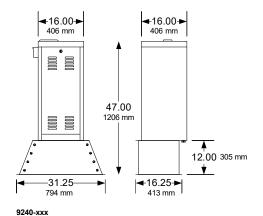
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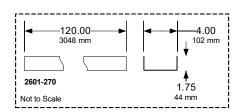
2600-448 #60 Chain, 20-Ft (6 m)

# **Maximum Security Slide Gate Operator**

- 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	НР	Power Outlets	Loop Ports <sup>2</sup>
9240	#80	1-2 Ft/sec .36m/sec	10,000 Lbs³ 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.
- 9200-135 pedestal included.

# 9240 Slide Gate Operator

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

#### Operators

9240-380 3 HP, 208V 3<sup>ø</sup> (12.8A) 9240-381 3 HP, 230V 3<sup>ø</sup> (12.6A)

9240-382 3 HP, 460V 3<sup>Ø</sup> (6.3A)

### **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

2601-270 Chain Tray Kit 10 Ft (3m)  $1601\text{-}197 \text{ Heater Kit } 208/230 \text{ VAC}^1$ 

1601-198 Heater Kit 480 VAC1

1. Use if temperature routinely falls below 10°F (-12°C).

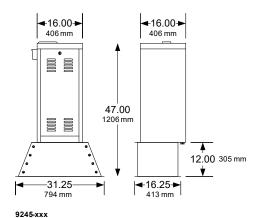
#### Chain

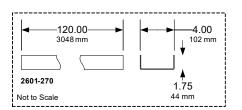
2601-269 #80 Chain, 20-Ft (6 m)

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

- 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
- Electric Brake
- 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	НР	Power Outlets	Loop Ports <sup>2</sup>
9245	#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.
- 9200-135 pedestal included.

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

#### Operators

9245-380 3 HP, 208V 3<sup>ø</sup> (12.8A)

9245-381 3 HP, 230V 3<sup>Ø</sup> (12.6A) 9245-382 3 HP, 460V 3<sup>Ø</sup> (6.3A)

### **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

2601-270 Chain Tray Kit 10 Ft (3m)

1601-197 Heater Kit 208/230 VAC<sup>1</sup>

1601-198 Heater Kit 480 VAC1

1. Use if temperature routinely falls below 10°F (-12°C).

#### Chain

2601-269 #80 Chain, 20-Ft (6 m)

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