

Crane Control Class 6815

Catalog

03

CRANE CONTROL
CLASS 6815



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The Electric Controller and
Manufacturing Company, LLC

Crane Control Class 6815

Type A Lifting Magnet Controllers

CRANE CONTROL CLASS 6815



Class 6815 Type A130 Controller

TYPE A LIFTING MAGNET CONTROLLERS FOR 31 TO 130 AMPERE GENERATOR POWERED MAGNETS*

Pricing and Ordering Information

Typical applications include crawler cranes, mobile cranes, locomotive cranes, and DC-powered overhead travelling cranes.

For rectifier-powered magnets, such as on AC cranes, select a Type M controller

- Line-Arc® Type M mill-type contactors
- Reliable, simple circuitry, easy to maintain
- Adjustable reverse current by rheostat inside the enclosure

Controller for Use With DC Generator Supply Only

VDC	Cold Magnet Current (A)	Indoor/Outdoor Type 3R Enclosure	
		Type	Price
230	31-80	AW80	\$ 6030.
	81-130 ▲	AW130	6722.

▲ 50-130 A range if generator is 20 kW or larger.

Modifications

Form No.	One modification from each group is available in the same controller.	Price
X11	Electrical interlocks on lift contactor, single-pole double throw, with 1.1 A break rating on 230 VDC, wired to terminal block for customer's use.	\$ 341.
R30 †	Booster (over-excitation) relay provides a limited-time contact closure at the start of each lift, for connection to a customer's generator shunt field circuit equipped for 275 V "pickup" and 190 V "carry," in order to increase all-day lifting efficiency. A Class 6815 Lift-Drop master switch or pushbutton station (or equivalent 230 VDC-rated pilot device) is required.	638.
R33 †	Booster with 12 VDC pilot relays. Provides a contact closure same as R30 above, but includes Lift-Drop pilot relays designed for use with low-voltage 1-N.O. momentary-contact Lift-Drop pushbuttons and a separate control source from customer's 12 V battery.	1377.
R34 †	Booster with 24 VDC pilot relays. Same circuit as R33, but designed for a 24 V battery.	1377.

† All booster (over-excitation) relay modifications require additional generator field circuitry and resistors properly matched to the generator. Square D is not in a position to specify or furnish this equipment. Therefore, controllers with booster relay modifications are recommended only to qualified crane manufacturers, or for replacement of existing booster-equipped controllers.

Pilot devices

Use Lift-Drop pushbutton station or master switch.

Ordering Information Required:

1. Class
2. Type
3. Form number

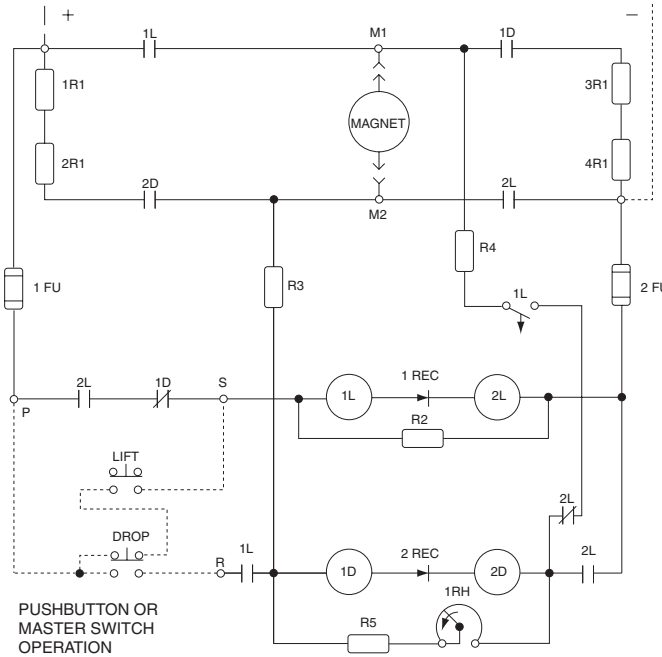
CP9B		Discount Schedule
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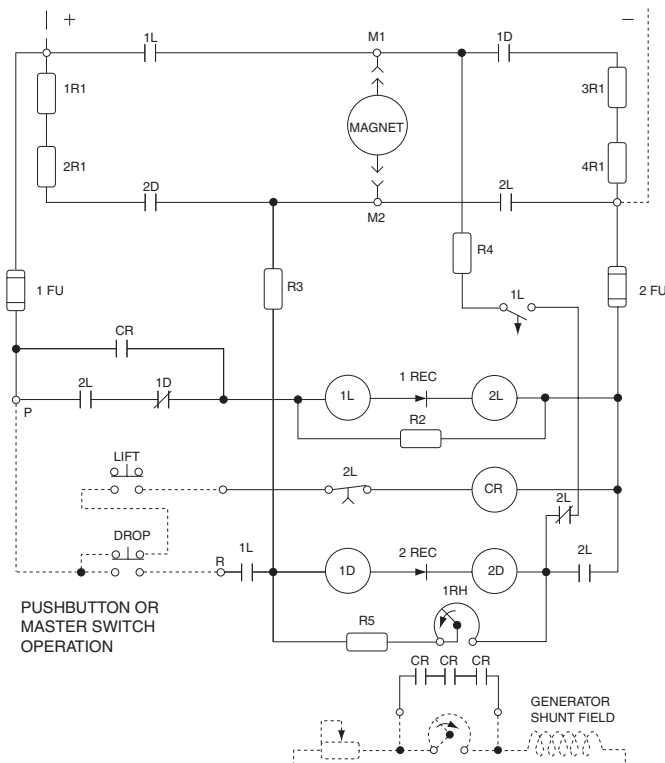
**TYPE A LIFTING MAGNET CONTROLLERS
FOR 31 TO 130 AMPERE GENERATOR POWERED MAGNETS**

Elementary Wiring Diagrams

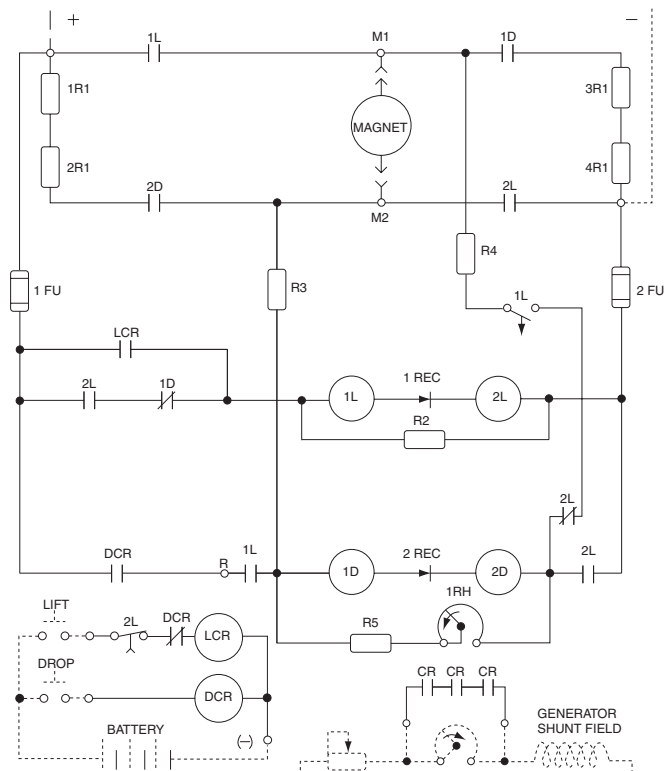
Standard Type A Controller



Type A Form R30 Controller



Type A Form R33 & R34 Controllers

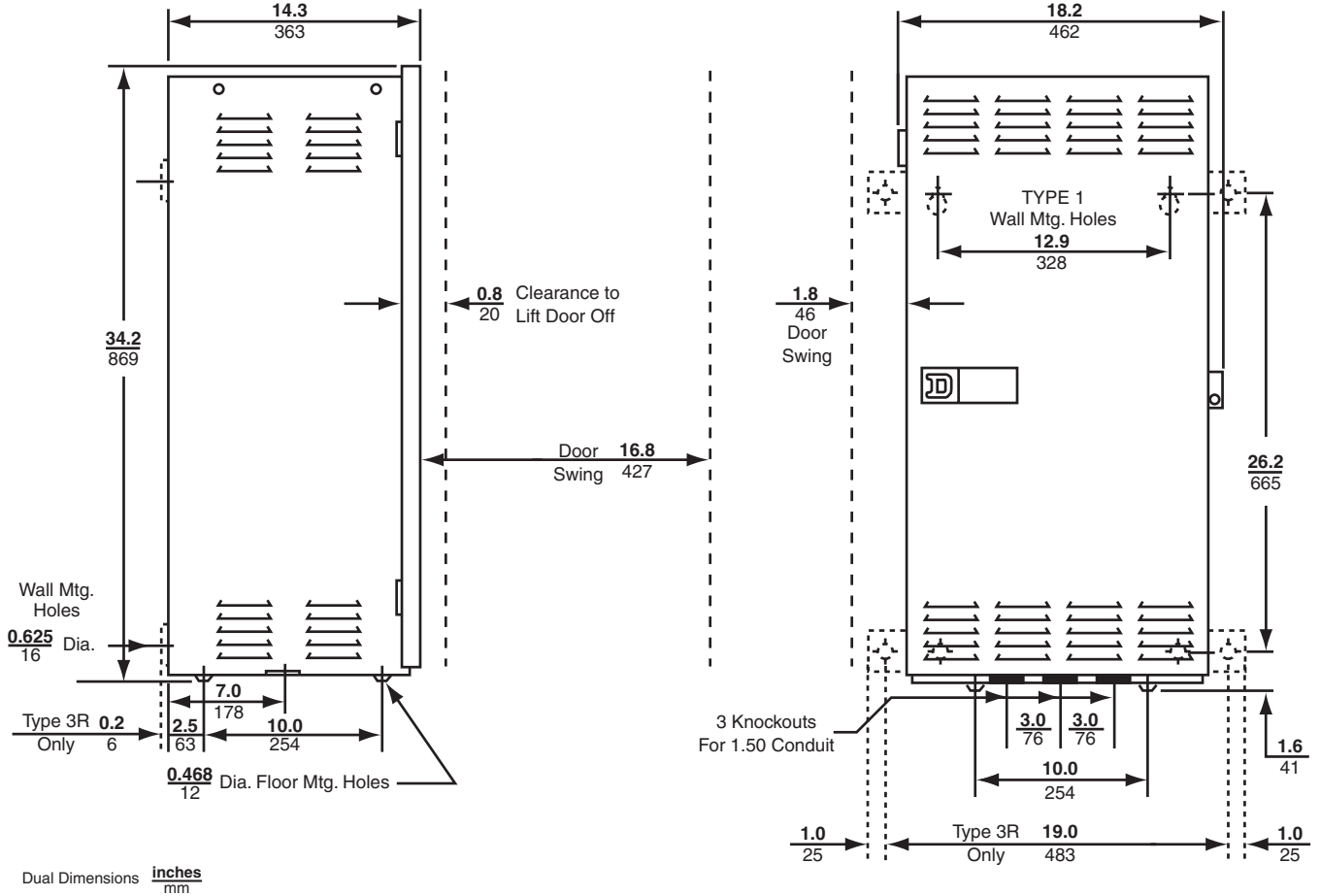


Crane Control Class 6815 Type A Lifting Magnet Controllers

TYPE A LIFTING MAGNET CONTROLLERS FOR 31 TO 130 AMPERE GENERATOR POWERED MAGNETS

Approximate Dimensions and Weights

CRANE CONTROL
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Approximate Net Weight – 150 lbs (67.5 kg)



**TYPE M LIFTING MAGNET CONTROLLERS
FOR 15 TO 175 AMPERE MAGNETS**

Pricing and Ordering Information

For use with rectifier or generator power source on AC or DC cranes.

- Line-Arc® Type M mill-type contactors
- Tab-Weld® mill-type discharge resistor
- Reverse-current adjustable within enclosure
- Reverse-current monitor light for optimum clean-drop adjustment
- Rectifier or generator power source is completely isolated from magnet discharge



**Class 6815 Type M135
Controller**

For Use with 3-Phase Rectifier or Generator DC Supply ▲

VDC	Cold Magnet Current (A) ■		Indoor/Outdoor Type 3R Enclosure	
	Min.	Max.	Type	Price
230	15	35	M35	\$ 6183.
	25	60	M60	6183.
	40	85	M85	7605.
	60	135	M135	8595.
	85	175	M175	9041.
	176	300	M300	13973.
	176	300	MF300	16248.

- ▲ Consult factory for fanning applications.
- For magnets with less than 15 A or greater than 175 A cold magnet current, consult factory.

Pilot Devices

Use Lift-Drop push button station or master switch.

Modifications

Form No.	One modification from each group is available in the same controller.	Price
X11	Electrical interlocks on lift contactor, single-pole double throw, with 1.1 A break rating on 230 VDC, wired to terminal block for customer's use.	\$ 341.
R30 †	Booster (over-excitation) relay provides a limited-time contact closure at the start of each lift, for connection to a customer's generator shunt field circuit equipped for 275 V "pickup" and 190 V "carry," in order to increase all-day lifting efficiency. A Class 6815 Lift-Drop master switch or pushbutton station (or equivalent 230 VDC-rated pilot device) is required.	638.
R33 †	Booster with 12 VDC pilot relays. Provides a contact closure same as R30 above, but includes Lift-Drop pilot relays designed for use with low-voltage 1-N.O. momentary-contact Lift-Drop pushbuttons and a separate control source from customer's 12 V battery.	1377.
R34 †	Booster with 24 VDC pilot relays. Same circuit as R33, but designed for a 24 V battery.	1377.

† All booster (over-excitation) relay modifications require additional generator field circuitry and resistors properly matched to the generator. Square D is not in a position to specify or furnish this equipment. Therefore, controllers with booster relay modifications are recommended only to qualified crane manufacturers, or for replacement of existing booster-equipped controllers.

Ordering Information Required:

1. Class
2. Type
3. Form

CP9B		Discount Schedule
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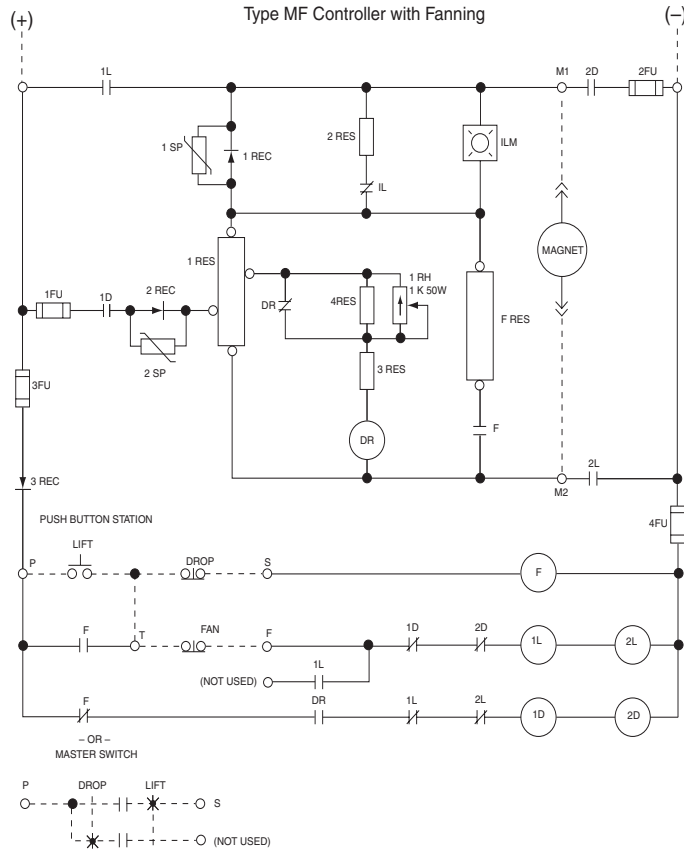
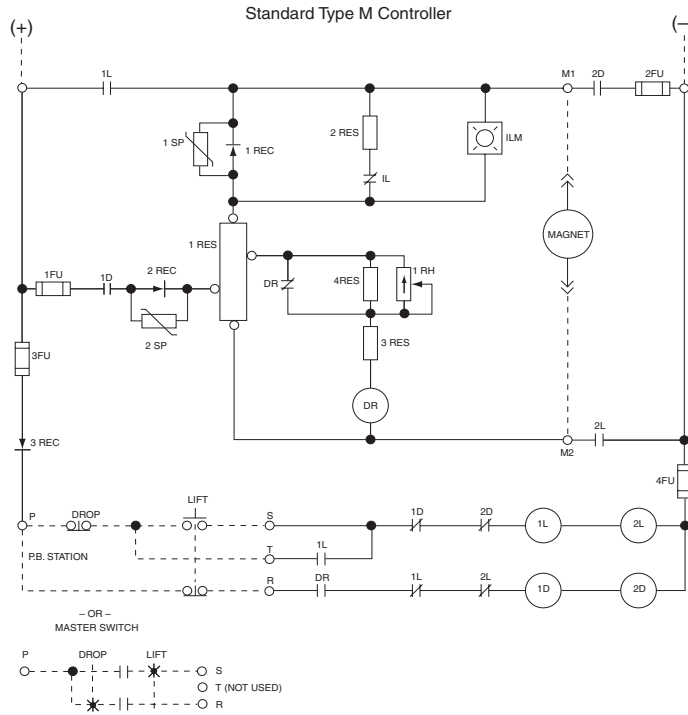


Crane Control Class 6815

Type M Lifting Magnet Controllers

TYPE M LIFTING MAGNET CONTROLLERS FOR 15 TO 175 AMPERE MAGNETS

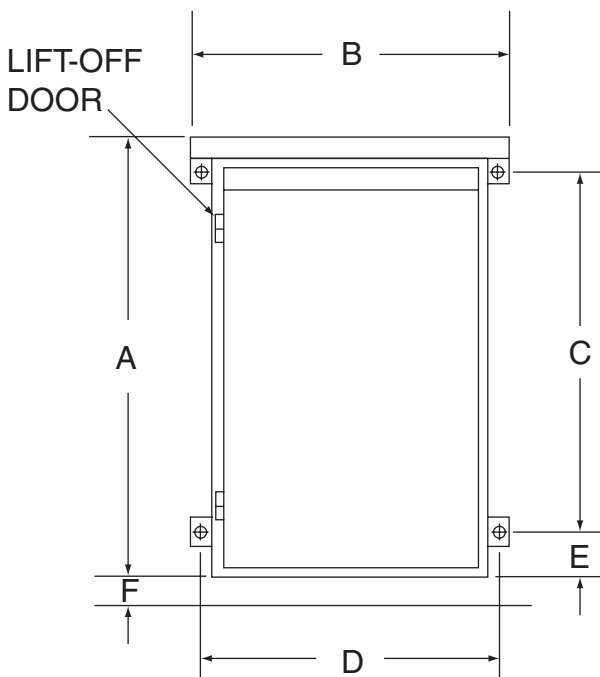
Elementary Wiring Diagram



Crane Control Class 6815 Type M Lifting Magnet Controllers

TYPE M LIFTING MAGNET CONTROLLERS FOR 15 TO 175 AMPERE MAGNETS

Approximate Dimensions and Weights



Magnet Controller Class 6815 Type	Approx. Weight lbs (kg)	Overall			Door Swing	Wall Mounting Holes				Minimum Clearance Required for Ventilation
		Height	Width	Depth		Diameter	C	D	E	
		A	B							
M35, M60	101 (45.5)	<u>29.00</u>	<u>20.38</u>	<u>11.73</u>	<u>18.00</u>	<u>.44</u>	<u>24.00</u>	<u>19.38</u>	<u>3.21</u>	<u>1.50</u>
MF35, MF60	104 (46.8)	737	518	298	457	11	610	492	82	38
M85	158 (71.1)	<u>37.30</u>	<u>24.20</u>	<u>13.90</u>	<u>20.70</u>	<u>.44</u>	<u>29.50</u>	<u>23.00</u>	<u>3.20</u>	None
M135	175 (78.8)									
M175	175 (78.8)									
MF85	208 (93.6)	<u>43.30</u>	<u>24.20</u>	<u>13.90</u>	<u>20.70</u>	<u>.44</u>	<u>35.50</u>	<u>23.00</u>	<u>3.20</u>	None
MF135	225 (101.3)									
MF175	225 (101.3)									

Dual Dimensions: inches
mm

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Crane Control Class 6815 Magnet Controller Pilot Devices

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Type MG1

PRICING AND ORDERING INFORMATION

Class 6815 master switches and push button stations are designed for use with Square D magnet controllers on 230 VDC. They should not be used with other controllers or on other applications.

Lever Type Lift-Drop Master Switch – Type MG1

- NEMA 1 enclosure
- Double-pole overlapping contacts
- Horizontal or vertical mounting

Lift-Drop Master Switch		
Type	Price	Discount Schedule
MG1	\$ 446.	CP9B

Push Button Station – Type KYK312

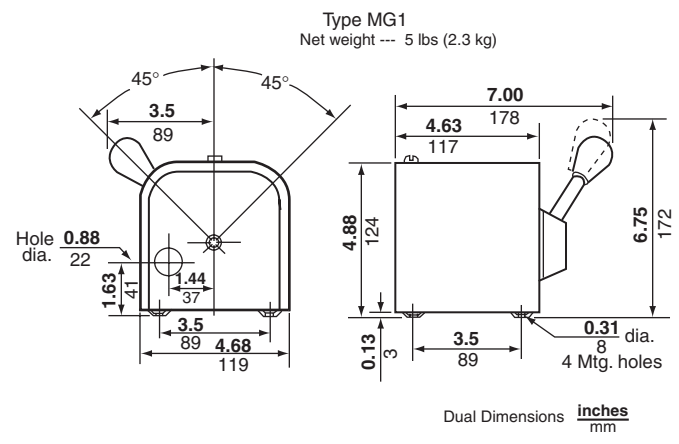
- NEMA 12 enclosure
- Mushroom Head operators
- Horizontal or vertical mounting



Type KYK312 Lift-Drop

Push Button Station			
Class	Type	Price	Discount Schedule
9001	KYK312	\$ 243.	CP1

Approximate Dimensions and Weights



Ordering Information Required:

1. Class
2. Type

These products for lifting magnet service are also available. Consult factory for price and delivery:

- Class 6820 Manual-Magnetic Disconnect Switches
- Class 6823 Fusible Manual Disconnect Switches
- Class 6825 Power Conversion Units

CP1	CP9B	Discount Schedule
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