

# Crane Control Class 5060

Catalog

17



**CONTENTS**

<b>Description</b> .....	<b>Page</b>
Pricing and Ordering Information .....	36
Application Data and Wiring Diagrams .....	38
Dimensions and Weights .....	40



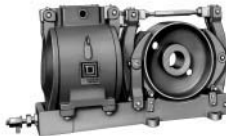
The Electric Controller and  
Manufacturing Company, LLC

CRANE CONTROL  
CLASS 5060

## Crane Control Class 5060 Adjustable Torque Drum Brakes



Class 5060  
Type A1001  
10" Brake



Class 5060  
Type A1301  
13" Brake



Class 9002  
Type AT4  
Foot Switch



Class 9002  
Type AW21  
Foot Switch

### PRICING AND ORDERING INFORMATION

Adjustable torque brakes are dual purpose drum type friction brakes. They combine an electrically released, spring set holding brake feature and an electrically operated adjustable torque stopping feature. They can be used with AC or DC motors.

- All electrically controlled
- Smooth, controlled stopping feature
- Spring set parking feature

A complete adjustable torque brake system consists of:

- 1 – Or more adjustable torque brakes
- 1 – Enclosed controller
- 1 – Push button station
- 1 – Foot switch

### Adjustable Torque Brakes

Brake Size (Wheel dia. in inches)	For Simplex Brake System (One Brake)	For Duplex Brake System (Two Brakes)	For Quadraplex Brake System (Four Brakes)	Price Per Brake With Standard Wheel	Price Per Brake Without Standard Wheel
	Type	Type	Type		
10	A1001	A1001	A1001	29682.	27036.
13	A1301	A1301	A1304	42478.	38548.
16	A1601	A1601	A1601	47814.	42244.

### DC Controllers for Adjustable Torque Brakes

VDC	Brake Size (Wheel dia. in inches)	For Simplex Brake System		For Duplex Brake System		For Quadraplex Brake System	
		Outdoor Enclosure NEMA Type 3R		Outdoor Enclosure NEMA Type 3R		Outdoor Enclosure NEMA Type 3R	
		CONTROLLER		CONTROLLER		CONTROLLER	
		Type	Price	Type	Price	Type	Price
230	10	ADW101	14184.	ADW102	14184.	ADW104	22258.
	13	ADW131	14904.	ADW132	14904.	ADW134	22258.
	16	ADW161	17524.	ADW162	17524.	ADW164	22258.

### AC Controllers for Adjustable Torque Brakes - consult factory

#### Set-Release Push Button Stations

Class	Type	Price ▲
9001	KYK38	Consult Factory

▲ Disc Sch D

#### Foot Switches

Class	Type	Price
9002	AW21 ▲	Consult Factory
9002	AT4 ★	3078.

▲ Disc Sch D

★ Disc Sch D

### Pressure Required To Operate Foot Switch For Maximum Service Torque

Class 9002	Type AW21	10 lb
Class 9002	Type AT4	20 lb

SCH

D



**ORDERING INFORMATION**

Ordering Information Required:

1. For adjustable torque brake:
  - a. Class
  - b. Type
  - c. Torque if different from standard
2. For brake controller:
  - a. Class
  - b. Type
  - c. Information on system – cab, pendant and radio operation
3. For push button station and foot switch (if required):
  - a. Class
  - b. Type
4. For brake wheel purchased with brake:

Supply the dimensions required for ordering wheels in the Class 5010 catalog sheets.
5. For brake wheels only:

When purchased separately, the brake wheel is considered to be a replacement part. Furnish the original Square D brake wheel part number or the dimensions required for ordering wheels in the Class 5010 catalog sheets.

Crane Control Class 5060  
Adjustable Torque Drum Brakes

APPLICATION DATA

Brake Selection–Thermal Capability

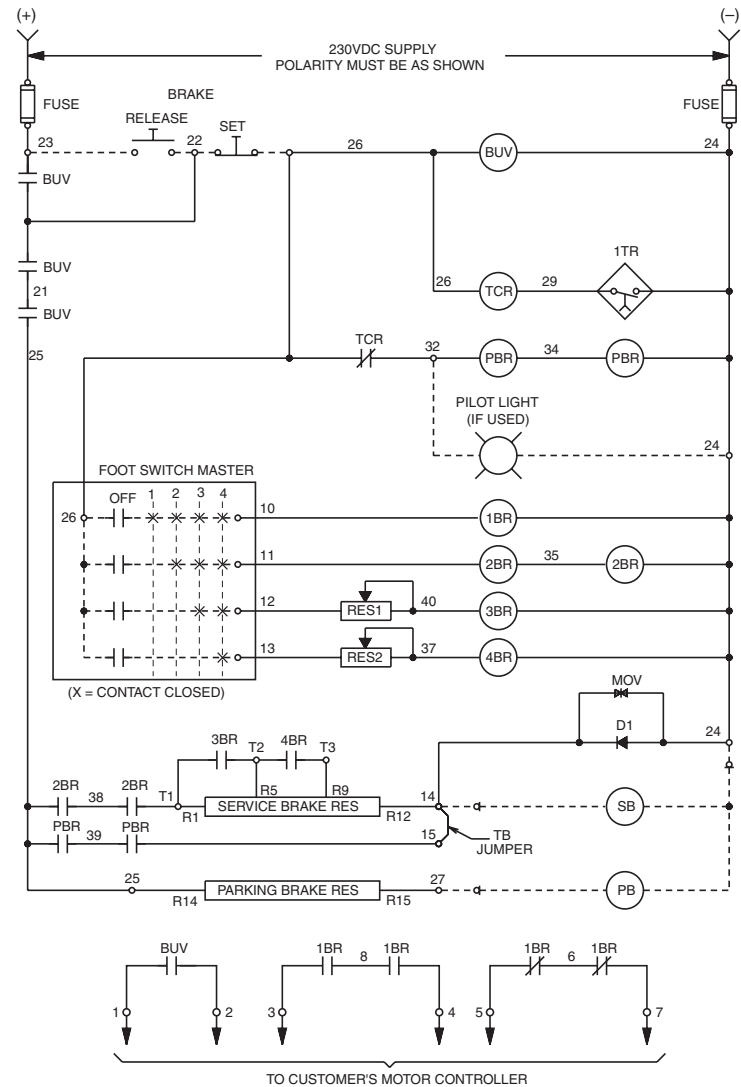
In addition to being selected to meet the torque requirements of the particular application, the brake system must be selected to prevent overheating of the brake wheel when operated on the anticipated duty cycle.

To calculate how often a stop can be made from full speed without overheating the brake wheel, see application data on page 22.

Torque Ratings and Wheel Data

Brake Size (Wheel Dia. in Inches)	Parking Torque (ft-lb)		Service Torque (ft-lb)			WR <sup>2</sup> of Wheel (ft-lb <sup>2</sup> )	Maximum Allowable Speed (RPM)
	Minimum	Maximum	Minimum	Maximum	Standard		
10	50	200	20	300	20-100-220	2.7	4000
13	150	550	50	850	50-290-540	10	3300
16	250	1000	100	1500	100-470-1000	30	2600

Elementary Wiring Diagrams for DC Controllers



For Single 10" and 16" Brake



**CRANE CONTROL  
CLASS 5060**

230 VDC SUPPLY  
POLARITY MUST BE AS SHOWN

FUSE

BRAKE  
RELEASE  
SET

23 22 26 24

BUV

21

25

TCR

32 34

PILOT LIGHT  
(IF USED)

24

FOOT SWITCH MASTER

OFF 1 2 3 4

26 10 11 12 13

(X = CONTACT CLOSED)

RES1

RES2

40 37

1BR 2BR 3BR 4BR

35

MOV

D1

24

SB

PB

2BR 3BR 4BR

T1 T2 T3

R1 R5 R7

SERVICE BRAKE RES

R9

R16

RES

25 27

PARKING BRAKE RES

R14 R15

1 2 3 4 5 6 7

TO CUSTOMER'S MOTOR CONTROLLER

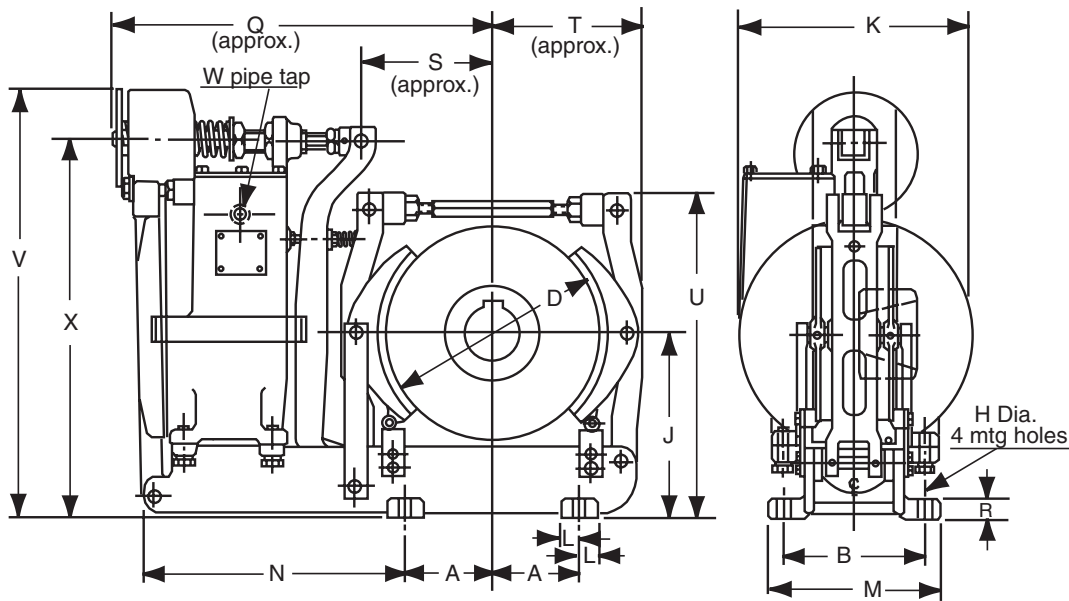
For Single 13" Brake

Crane Control Class 5060

Adjustable Torque Drum Brakes

APPROXIMATE DIMENSIONS AND WEIGHTS

10" and 16" Adjustable Torque Brake



Dual Dimensions inches  
mm

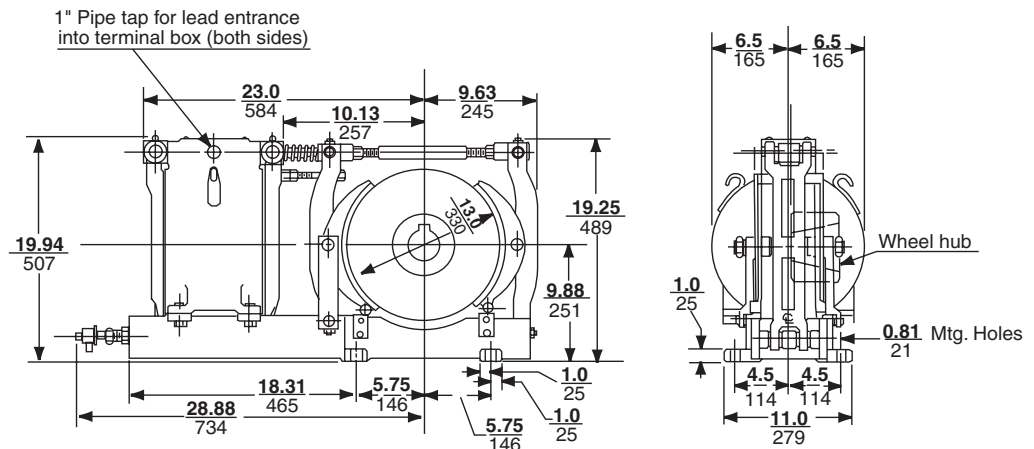
Brake Size (Wheel dia. in inches)	A	B	D	H	J	K	L	M	N	Q	R	S	T	U	V	W	X	Weight lbs (kg)	
																		Wheel Only	Brake Only
10	4 102	6.25 159	10 250	0.69 17	8.38 213	10.75 273	0.88 22	8 203	12.19 310	17.88 454	0.75 19	6 152	7.06 179	14.63 372	19.94 506	0.75 19	17.19 437	25 (11.3)	250 (112.5)
16	7.5 191	10.75 273	16 406	1.06 27	12.13 308	15.25 387	1.13 29	13 330	19.13 486	25.38 645	1.25 32	11.25 286	12.25 311	22.38 568	27.13 689	1 25	23.38 594	110 (49.5)	640 (288.0)



## Crane Control Class 5060 Adjustable Torque Drum Brakes

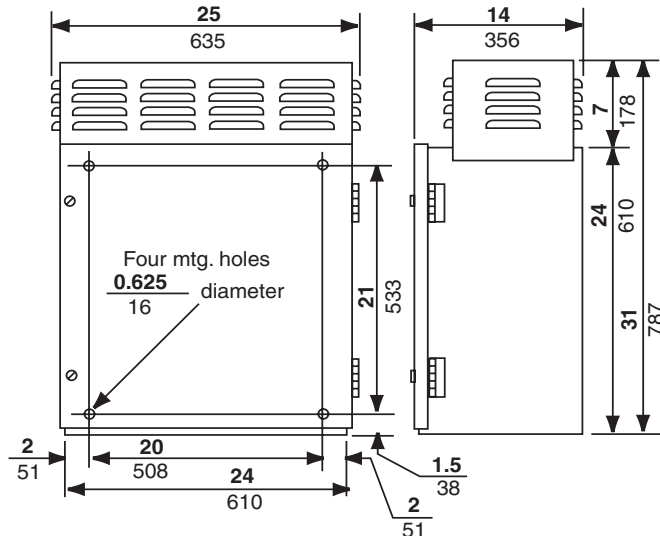
### APPROXIMATE DIMENSIONS AND WEIGHTS

#### 13" Adjustable Torque Brake



Weight of wheel only – 60 lb (27 kg)  
Weight of brake only – 570 lb (259 kg)

#### Adjustable Torque Brake Control Panel Simplex and Duplex •



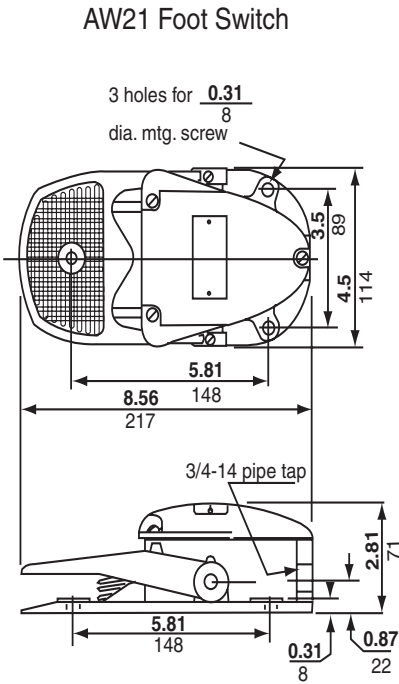
Weight – 430 lb (196 kg)

• Consult factory for quadruplex controller dimensions

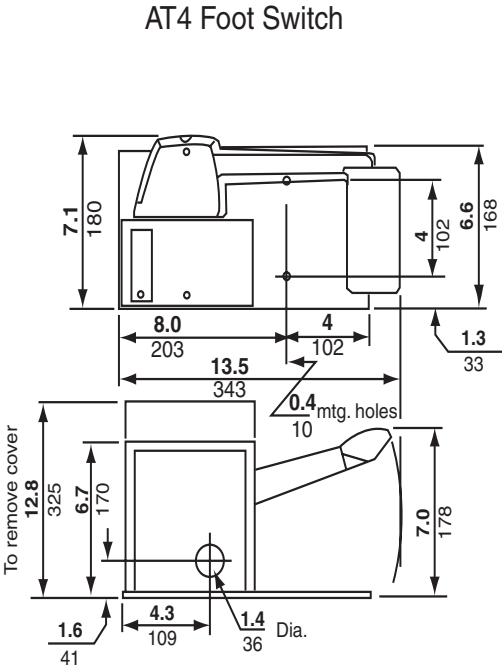
Dual Dimensions  $\frac{\text{inches}}{\text{mm}}$

Crane Control Class 5060  
Adjustable Torque Drum Brakes

APPROXIMATE DIMENSIONS AND WEIGHTS



Weight – 5 lb (2 kg)



Weight – 18 lb (8 kg)

Dual Dimensions  $\frac{\text{inches}}{\text{mm}}$

