Regenerative power door operator for moderate to high traffic applications

H.H



LOW ENERGY OPERATOR CATALOG



10



# **INTRODUCTION**

As one of the world's only regenerative power door operators, Norton's 5800 Series ADAEZ is certified by GreenCircle<sup>®</sup> to reduce energy consumption by as much as 100 percent versus other comparable operators. Available in wireless and plug-in versions and able to fit in the tightest of spaces, the 5800 ADAEZ is simple to install and use.

#### **FEATURES**

- » Regenerative drive or continuous duty operation
- » Non-handed
- » 95° door opening
- » Push and pull side mounting
- » Radio Frequency stainless steel push buttons
- » Integral RF receiver
- » Shock absorbing arm
- » 24VDC input port
- » ADA1015P hardware kit
- » Auxiliary activation input port
- » Patented auto-tune feature
- » 2 year limited warranty

# **TABLE OF CONTENTS**

Functions/Descriptions, How it Works	3
Product Descriptions, Certifications	4
Applications	5
Specifications	6
Wireless Interface Module (WIM)	7
Kits	8
Technical Information, Wiring Diagrams	9
Product Dimensions	10
Accessories, Parts	11-12
Trash Room Doors	13-14
How to Order	16







# **FUNCTIONS / DESCRIPTIONS**

- » Adjustable Hold Open
  - > Amount of time a door will stay in the full open position after an activation
- » Dynamic Braking
  - > Braking or slowing of the door if excessive door speed occurs resulting from a wind load or an abusive open condition
- » Emergency Interface Relay\*
  - Door closes and ignores any activation input until signal is discontinued
- » Executive Mode Feature
  - > When door receives activation signal it opens and remains open until either a second signal is received or door is manually moved in closing direction
- » Latch Assist
  - > At closed position, after an activation, the door is pulled in
  - > After the door has closed, the door is pulled in to assist with latch release/engagement

- » Obstruction Detection
  - Open door closes if it hits an obstruction while opening
  - Close (Stop on Stall) door will stop once it hits an obstruction and will rest against the obstruction until obstruction is removed
- » On/Off Switch
  - > Disables operator activation
- » Open Delay\*
  - > Delays operator opening for locking hardware
- » Outside Push Button Disable\*
  - > When contact is closed, outside push button is disabled
- » Power Close
  - Additional force to assist door closing between 90° and 70° and 10° and 0°
- » Push & Go
  - > As the door is manually opened, the operator "senses" movement and opens door to the full-open position
- » Single Relay Output\*
  - > Closes to indicate a valid activation

\*Only available with Wireless Interface Module (WIM)

# **HOW IT WORKS**

How does the 5800 Series Pro work without electrical power?

The 5800 Series Pro is an extreme duty, low energy operator designed for moderate to high traffic manual opening applications that occasionally requires powered operation. A regenerative drive system charges an onboard battery pack eliminating the need for electrical power.

The 80/25 guidelines should be applied when ordering this operator. It is recommended that the 5800 Series Pro be used on a door that gets approximately 80 manual cycles or more per day and is used 25% or less automatically.

When applied using the 80/25 guideline this operator will self generate all the power it needs to keep its field

replaceable, onboard, battery pack charged for up to 12 years and in some cases longer.

A fully charged battery has the capability to open a door up to 2000 times in a row, generously allowing for periodic fluctuations from 80/25 guidelines with little impact on the product's overall usability. Example: 30% automatic use for one day is not a problem, as long as that level of automatic use is not sustained.

The 5800 Series Pro can be used outside of the 80/25 parameters. Simply plug the unit into a common 110 VAC electrical outlet using our ADA1015P hardware kit option. The hardware kit is a low voltage plug in transformer and can be added to existing installed field units.



# **PRODUCT DESCRIPTIONS**

#### ADAEZ PRO: MODELS 5831 (PUSH), 5811 (PULL)

- » No electrical power required
- » Moderate to high traffic, manual opening applications that occasionally require automatic operation
- » Regenerative drive system charges an onboard battery pack
- » Models 5831 and 5811 excel in applications where the traffic pattern allows for 80 door cycles per day, 25% of which are automatic and 75% of which are manual. These models requires no electrical connection, no permit, no inspection, no wiring, and no low voltage license. The 5800 Series installs like a manual door closer in less than 1 hour.

#### ADAEZ PRO PLUS: MODELS 5833 (PUSH), 5813 (PULL)

- » 24VDC powered continuous automatic use
- » Connects to ANY 24VDC power supply
- » Commercial applications requiring Push & Go, Power Close, and Electric Lock Interface.
- » Ideal for openings requiring continuous automatic use or automatic use more than 25% of the time

#### ADAEZ PRO COMPLETE: MODEL 5845 (PUSH AND PULL)

- » Bundles all the configurations of the PRO and PRO PLUS models into one easy to stock package
- » Right or left hand doors
- » Push and pull side mounting hardware
- » Black and aluminum finish covers
- » Mounting hardware for virtually any door and frame
- » 24VDC plug-in transformer kit for continuous automatic use applications

**CERTIFICATIONS** 

- » ANSI/BHMA A156.19 certified
- » ETL tested to UL/cUL 325 standard for automatic operators
- » Complies with requirements for Americans with Disabilities Act (ADA)
- » UL10c 90-minute positive pressure fire rating
- » Manufactured in an ISO 9001 and ISO 14001 certified facility
- » Verified by GreenCircle to offer these energy savings as compared to similar products:
  - 5800 Series ADAEZ<sup>®</sup> (plug-in) 94% efficiency
  - > 5800 Series ADAEZ<sup>®</sup> (wireless) 100% efficiency
- » UL certified environmental product declaration





# **APPLICATIONS**



Push side mounting without electrical power



Pull side mounting without electrical power



Push side mounting with ADA1015P hardware kit



Pull side mounting with ADA1015P hardware kit



# **SPECIFICATIONS**

- » Provide low energy automatic door operator complying with requirements of ANSI A156.19.
- Provide an operator with adjustable opening and closing forces that meet the provisions of ANSI A117.1 and the Americans with Disabilities Act.
- » Provide an operator with a regenerative drive system which charges the on-board battery pack when unit is operated manually and which requires no external electrical power.
- » Provide an operator that can connect to ANY 24VDC power supply to keep an on-board battery pack fully charged eliminating the need for manual traffic charging. When used with 24VDC input the operator shall supply up to 2000 automatic operations upon loss of building power.
- » Provide an operator which has been verified by GreenCircle to offer these energy savings as compared to similar products:
- » 5800 Series ADAEZ (plug-in) 91% efficiency
- » 5800 Series ADAEZ (wireless) 100% efficiency
- » Provide an operator which, upon installation, will determine door size and weight and automatically tune controller to operate within ANSI A156.19 and A117.1 standards. Operator shall also have the following adjustable functions:
  - > Opening/closing speed
  - > Hold-open time
  - > Close check
  - Opening/closing force
- » Provide operator with on-board diagnostics which will continually maintain control of door speed in wind or abusive environment conditions.
- » Provide operator that will continue closing door within ANSI A156.19 and 117.1 requirements without any external power supplied. Upon meeting an obstruction during the opening cycle the door shall remain under power for one second and then close under spring force; if the door meets an obstruction during closing, the door will maintain a closing force of 8 lbs or less.

- » Provide unit capable of operating doors up to 48" wide, weighing up to 250 lbs.
- » Provide unit that will operate in climates with temperatures above -40° F and has a two year warranty.
- Provide operator with two stainless steel, jamb mounted, push button transmitters in choice of 1-3/4" x 4-3/4" narrow, 4-1/2" x 4-1/2" square styles, or 5 1/4" x 5 1/4" wave-to-open switch style, with required signage. Locate push buttons as directed by architect and within ANSI A156.19 and 117.1 guidelines.
- Provide operator which utilizes a triangular hardened steel output shaft to connect arm with a two piece tapered coupling for superior slip resistance.
- » Provide operator and push button transmitter with circuit boards that have been specially coated to resist moisture and humidity making the electronics weather resistant.
- » Provide operator with integral heavy duty cast aluminum shock absorbing arm, which when fully extended is in full tension eliminating the need for an auxiliary door stop.
- » Provide operator with two architecturally finished covers and black powder coated frame, arms and mounting brackets.
  - Black (BHMA 693T)
  - Aluminum (BHMA 689)
- » Provide an operator incorporating "Push & Go" feature to allow door movement to activate door open cycle or recycle door (PRO PLUS only).
- » Provide an operator incorporating "Power Close" feature to utilize the motor to close a door help open by wind, stack pressure or latchbolt (Models 5833, 5813 only).
- » Provide an operator incorporating "Latch Assist" feature to apply pulsed power in the closing direction to assist in latching and unlatching of the door

6 | Norton Door Controls



# WIRELESS INTERFACE MODULE (ADA1028W)

#### System Description:

The Wireless Interface Module (WIM) allows the 5800 door operator to interface to 5800 wired or wireless push buttons, wireless remote, an electric lock, fire panel, access control, and an outside push button disable contact. The WIM can be used with any 5800 model.

#### **Mounting:**

The WIM (4.25"W x 5.75" H) is designed to fit inside a power supply cabinet, using a supplied plastic mounting plate with double sided tape and fasteners.

#### Inputs:

- » Power input: 24VDC
- » Hardwire push buttons input: separate INSIDE and an OUTSIDE activation input
- » Wireless push button input: separate INSIDE and an OUTSIDE RF activation input
- » Handheld transmitter input: part # ADA1031 interface
- » Operator connection cable: plug-in swing door cable connector interface
- » Lock power: dry contact SPDT to power an electric lock
- » Outside push button disable: privacy feature

#### **Outputs:**

- » Wireless output: RF signal to activate operator
- » Output contacts: SPDT dry contact output for AUX signal
- » Lock contacts: SPDT dry contact output for LOCK
- » Access control contacts: indicates valid unlock signal
- » Signal delay timer: 1.5 second lock release delay
- » Emergency interface relay (EIR): disables signal inputs

#### **Codes/Listings:**

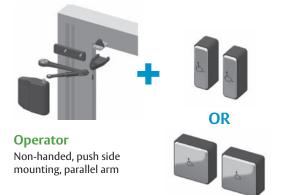
- » UL 325 standard for automatic operators
- » FCC 47CFR 15C and RSS 210





# **KITS**

Models 5831 x NPB (Push), 5811 x NPB (Pull)

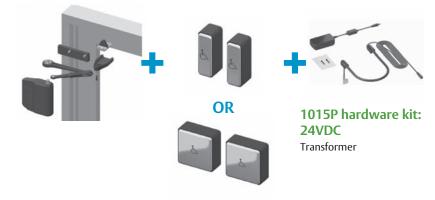


**Push buttons with** wireless (RF) transmitters Narrow Style or Square **Option:** 



Aluminum dress cover Replaces standard black cover; operator frame and arm are always black finish

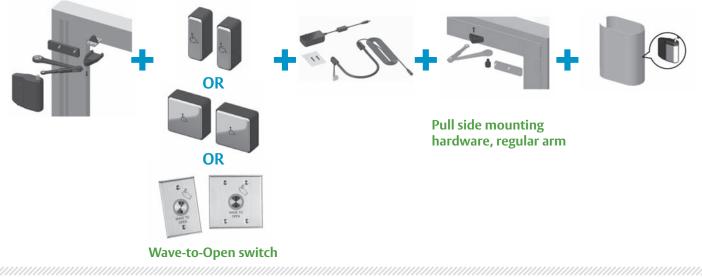
#### Models 5833 x SQPB (Push), 5813 x SQPB (Pull)



**Option:** 



Models 5845 x NPB (Push & Pull), 5845 x SQPB (Push & Pull), 5845 x WTO (Push & Pull)



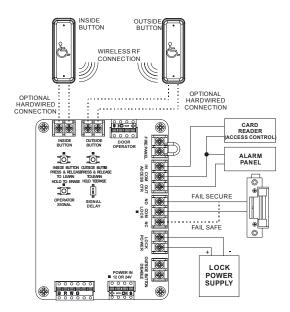
8 | Norton Door Controls



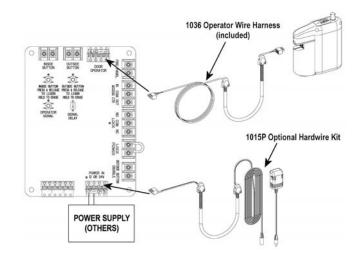


# **TECHNICAL INFORMATION: WIRING DIAGRAMS**

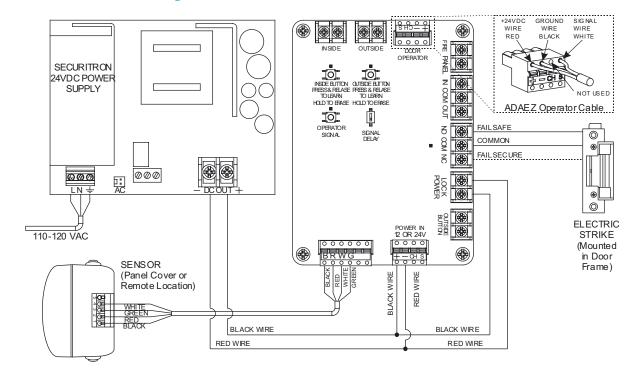
# Electric strike with RF or wired push buttons and card reader (or other access control)



#### Wiring the WIM and operator



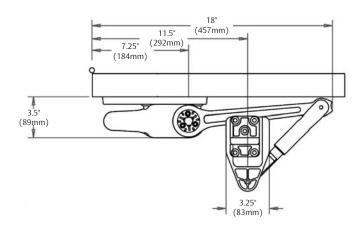
#### **TRD Trash Room Door Wiring**

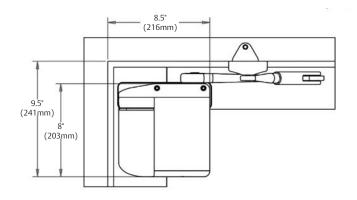




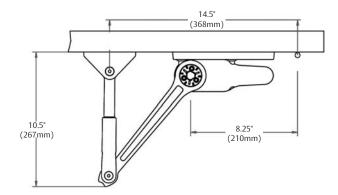
# **PRODUCT DIMENSIONS**

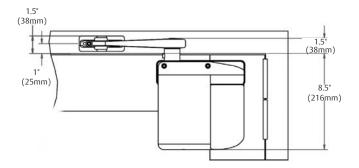
**Push Side** 





# **Pull Side**





All dimensions are approximate

#### Notes:

- Maximum door width 48" (122 cm)
- > Maximum door weight 250 lbs
- > Dimensions are listed in inches/mm unless noted

Experience a safer and more open world





# **ACCESSORIES, PARTS**



ADA1015P Kit: transformer, armored

door cord, end links 50' of low voltage cable, power port cnt.



ADA1014 Decal pack



ADA1001 Door arm assembly



ADA1007P Battery assembly



ADA1010P\* Operator body - ADAEZ PRO ADA1010NY\* Operator body - NYC TRD ADA1010E\* Operator body - Europe

\* battery not included



ADA1002 Operator cover – black ADA1004 Operator cover – aluminum



ADA1005WP

Electronic control kit for Pro setup and PC board (white board) ADA1005WN

Electronic controlkit for NYCTRD setup and PC board (white board)



ADA1028W Wireless Interface Module

Experience a safer and more open world



# **ACCESSORIES, PARTS**



ADA1022

Kit to convert SPDT switch to DPDT switch



# ADA1012-1

1-3/4" push button assembly

ADA1012-2

1-3/4" push button assembly with RF transmitter



# 700

Wave-to-Open switch Single gang and double gang packaged together without RF transmitter Dimensions: 3" W x 4-3/4" H (single); 4-1/2" W x 4-1/2" H (double) (may require ADA1015P)



#### ADA1019-1:

4-1/2" square push button assembly

ADA1019-2

4-1/2" square push button assembly with RF transmitter

ADA1019-3

4-1/2" square push button assembly with DPDT switch

#### ADA1019-4

4-1/2" square push button assembly with DPDT switch with RF transmitter



#### 704

Narrow Wave-to-Open switch Narrow gang Sensor requires movement for activation Variable relay - hold time from 0-35 seconds Range 0" to 4" Durable stainless steel body holds up in moist environments

Part #	Descritpion
ADA1009	Mounting hardware (includes rivetnut installation toolkit)
ADA1006	Operator mounting bracket with covers
ADA1023	External battery charger kit
ADA1025	Multi-purpose timer
ADA1026	Bottom cover with screws
ADA1031	Hand held remote control
ADA1031E	Hand held remote control (Europe)
ADA1021	Kit to convert to pull side
ADA1024	Kit to convert to push side
ADA1008	Wireless push button transmitter (circuit board only)
ADA1029	Occupancy sensor (models 5839, 5819 only)
ADA1015C	Door cord WIM
ADA102SP	24VDC power supply, WIM, and mounted sensor

# Experience a safer and more open world





# **TRASH ROOM DOORS**



- **FEATURES** » Continuous duty operation
- » Non-handed
- » 95° door opening
- » Push or pull side mounting
- » Occupancy sensor
- » Electric lock interface module
- » Shock absorbing arm
- » Black cover (standard); aluminum cover (optional)
- » 24 VDC input port
- » Built-in on/off switch
- » Auxiliary activation input port

# **APPLICATIONS**

» Trash rooms in high rise buildings

How to Order	Mounting
5839-NYW	Push
5819-NYW	Pull

# **INCLUDED IN PACKAGE\***

- » Operator
- » Mounting hardware
- » 24VDC 1 amp power supply
- » Occupancy sensor
- » Armored door cord
- » (2) 1-3/4" surface mounted, stainless, hardwired push buttons
- » 20 feet of operator power and signal wire
- \* Electric lock not included

# Models 5839 and 5819 were designed to meet a New York City building code that required trash room doors be equipped with automated doors to make them more accessible to disabled persons. These models include an occupancy sensor to keep the door open while the room is in use and a power close feature to ensure the door closes and re-latches.

# **BENEFITS**

Easy to Install

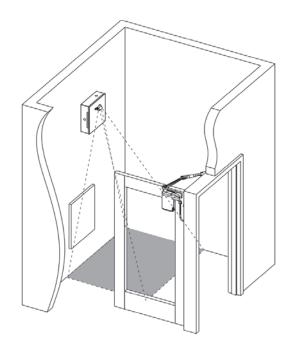
- » Occupancy sensor keeps door open while room is in use
- » Optional power close ensures consistent door latching

#### Flexible

- » Controls doors up to 48" wide and 250 lbs in weight
- » Acts like a manual door closer

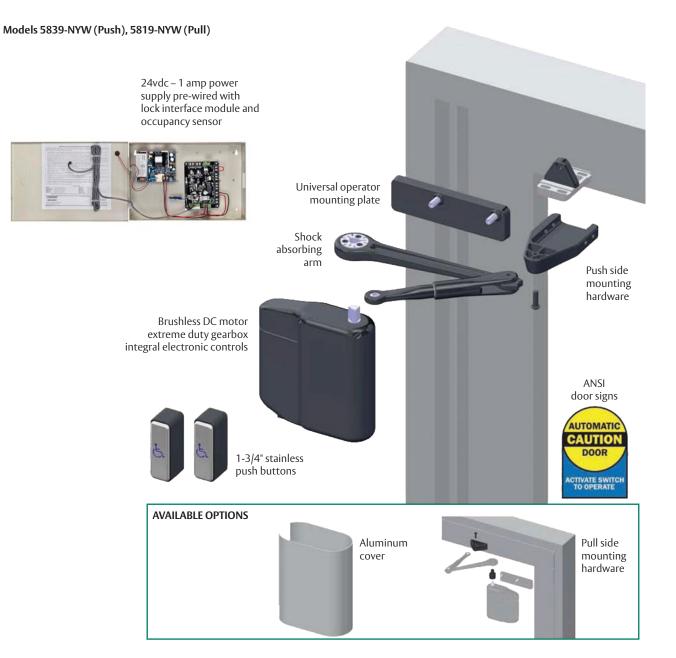
#### Dependable

- » Grade 1 heavy-duty, commercial design
- » Brushless DC motor/gearbox tested in excess of 10 million cycles
- » Optional dynamic and back check braking for abusive environments





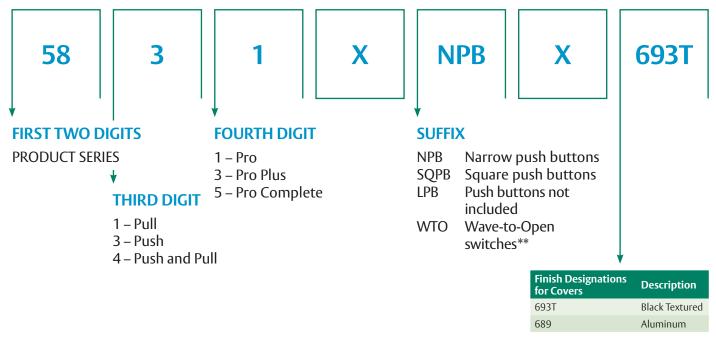
# KIT







# **HOW TO ORDER**



		Function		Description				
ADAEZ KITS	Model Number	Push	Pull	Narrow Style Buttons	Square Style Buttons	Wave-to- Open Switch	1015 Hardwire Kit: 24VDC	Aluminum Dress Cover
PRO	5831 x NPB	٠		•				0
	5811 x NPB		•	٠				0
PRO	5833 x SQPB	٠			٠			0
	5813 x SQPB		•		٠			0
PRO PLUS	5833 x NPB	٠		•			•	0
	5813 x NPB		•	٠			•	0
PRO PLUS	5833 x SQPB	٠			•		•	0
	5813 x SQPB		•		٠		•	0
PRO COMPLETE	5845 x NPB*	٠	•	•			•	•
	5845 x SQPB*	٠	•		•		•	•
	5845 x WTO*	•	•			•	•	•

The ASSA ABLOY Group is the global leader in access solutions. Every day, we help billions of people experience a more open world.

ASSA ABLOY Opening Solutions leads the development within door openings and products for access solutions in homes, businesses and institutions. Our offering includes doors, frames, door and window hardware, locks, perimeter fencing, access control and service. Since 1880, Norton door controls have been an integral part of schools, hospitals and businesses around the globe. When you need products and people that perform at the highest level, rely on Norton – From Open to Close.

Norton Door Controls | www.nortondoorcontrols.com 3000 Highway 74 East | Monroe, NC 28112 | 1.877.974.2255

ASSA ABLOY Opening Solutions Door Security Solutions Canada | www.assaabloy.ca 160 Four Valley Drive | Vaughan, ON L4K 4T9 | 800.461.3007

Norton is a brand associated with ASSA ABLOY Accessories and Door Controls Group, Inc., an ASSA ABLOY Group company. Copyright © 2012-2020, ASSA ABLOY Accessories and Door Controls Group, Inc. All rights reserved. Reproduction in whole or in part without the express written permission of ASSA ABLOY Accessories and Door Controls Group, Inc.