AGswitch and Genswitch Automatic Transfer Switches

Product Focus

- Transfer Switch Equipment
- Uninterruptable Power Systems
- Backup Power Systems

Product Description
The Cutler-Hammer "Ag" and "Gen" automatic transfer switches by Eaton Electrical are designed for a variety of standby power applications for critical loads. The Agswitch standard feature package is designed specifically for agricultural standby power applications. The Genswitch is designed with an enhanced feature package for most standby power applications and is ideally suited for rental genset applications. They provide the utmost in performance, reliability and value in a compact package. In the event of a primary power source interruption, a transfer switch provides an effective means to transfer the load circuits to an alternate power source while reducing the possibility of injury or property damage.

Agswitch and Genswitch Industrial Design Highlights

- Agswitch – 30 A to 800 A, for 240/120 Vac single phase and 208Y/120 Vac three phase systems only
- Genswitch – 30 A to 2000 A, with field selectable multi-tap transformer panel permits operation on 600, 480, 415, 380, 240, 220 and 208 Vac 60/50 Hz, single and three phase systems.
- Optionally rated as suitable for use as service equipment
- Available with integral overcurrent protection
- Safe manual operation under full load
- Superior withstand, interrupting and closing ratings
- Molded Case Devices designed specifically for UL 1008
- Field selectable multi-tap transformer (Genswitch Only) panel permits operation on a wide range of system voltages
- ANSI 61 powder-coated, baked-on paint enclosure
- UL 1008 Listed

Standard Features
The Agswitch and Genswitch are designed with standard feature packages ideally suited for their targeted application.

- Agswitch with standard Feature Group FGA22.
- Genswitch with standard Feature Group FGG25 (30 to 1000 A) and FGG19 (1200 to 2000 A)

Standard features include:
- Time Delays: TDNE, TDES, TDEN, and TDEC. TDEF-FGA22 and FGG25 only
- Source 2 all phase undervoltage / underfrequency sensing
- System test pushbutton
- Bypass time delay pushbutton – FGA22 and FGG25 only
- Source available and connected LED indication
- Source available contacts
- Source position indication contacts- FGA22 and FGG25 only
- Plant exerciser with failsafe
- Source 1 all phase undervoltage
- Go to source 2 input
- Time delay neutral

Service Entrance Equipment
The Agswitch and Genswitch are optionally available as rated for use as service equipment. Service equipment rated transfer switches are utilized when the entire load of a facility is critical and needs to be backed up by an alternate power source. Cutler-Hammer Service Equipment rated transfer switches with integral overcurrent protection may be installed at the point of service entrance without the need for separate upstream disconnect devices and their respective power interconnections.

Table 2 ATC 400 Programmable Set Point Operating Range

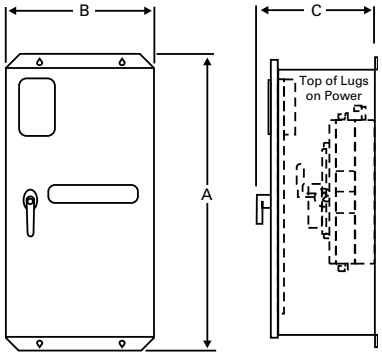
Set Point	Range
TDNE	0-1800 Seconds
TDES	0-120 Seconds
TDEN	0-1800 Seconds
TDEC	0-1800 Seconds
TDEF	0-6 Seconds
TDN	0-120 Seconds
Nominal Voltage	120-600 Vac①
Nominal Frequency	50 Hz or 60 Hz
System Phase	1 or 3
Undervoltage Dropout	50%-97% of Nominal
Undervoltage Pickup	Dropout +2% to 99% of Nominal
Overvoltage Dropout	105%-120% of Nominal
Overvoltage Pickup	103% of Nominal to Dropout -2%
Underfrequency Dropout	90%-97% of Nominal
Underfrequency Pickup	Dropout +1% to 99% of Nominal
Overfrequency Dropout	103%-110% of Nominal
Overfrequency Pickup	101% of Nominal to Dropout -1%
Plant Exerciser	Enabled or Disabled, Load or No Load, Event: Selectable Daily 7, 14 or 28 Day Cycle, Engine Run Time: 0-600 Minutes
Test Pushbutton	Operates per Plant Exerciser Settings
Password	User Selectable
Language	English

①The AGswitch is rated for application on 120/208, 3-phase, 4-wire and 120/240, 1-phase,3-wire, systems only.

Table 1. 30 – 1000A Types ATHI, ATVI, ATH2, ATV2, ATH4, ATV4, MTVX, NTHS, NTVS
Dimensions in inches (mm) and approximate shipping weight in Lbs. (kg)

Switch Type	Enclosure			Bolt Pattern		Standard Terminals ①			Weight
	A	B	C	G	H				
	Height	Width	Depth	Horizontal	Vertical	Line	Load	Neutral	
HFD (30 – 100A) ②	35.61 (904.5)	20.06 (509.5)	13.34 (338.8)	10.25 (260.4)	34.73 (882.1)	(1) #14 – 1/0	(1) #14 – 1/0	(3) #14 – 1/0	185 (84)
HFD (150 – 225A) ②	35.61 (904.5)	20.06 (509.5)	13.34 (338.8)	10.25 (260.4)	34.73 (882.1)	(1) #6 – 300	(1) #6 – 300	(3) #4 – 300	185 (84)
HFD (30 – 100A) ③	47.74 (1213)	20.81 (528.6)	17.22 (437)	10.75 (273)	45.24 (1049.1)	(1) #14 – 1/0	(1) #14 – 1/0	(3) #14 – 1/0	227 (103)
HFD (150 A) ③	47.74 (1213)	20.81 (528.6)	17.22 (437)	10.75 (273)	45.24 (1049.1)	(1) #6 – 300	(1) #6 – 300	(3) #4 – 300	227 (103)
HKD (225 – 300A)	56.00 (1422.4)	20.81 (528.6)	18.40 (467.4)	11.00 (279.4)	53.50 (1358.9)	(1) #3 – 350	(1) #6 – 350	(3) #4 – 350	395 (179)
HLD (400A)	64.00 (1625.6)	25.81 (655.6)	18.40 (467.4)	16.00 (406.4)	61.48 (1561.6)	(1) 4/0 – 600	(2) #1 – 500	(6) 250 – 350	395 (179)
HLD (400A) ④	53.00 (1346.2)	25.81 (655.6)	18.40 (467.4)	16.00 (406.4)	50.48 (1282.2)	(2) 3/0 – 350	(2) #1 – 500	(6) 250 – 350	395 (179)
HLD (600A) ②	64.00 (1625.6)	25.81 (655.6)	18.40 (467.4)	16.00 (406.4)	61.48 (1561.6)	(2) 3/0 – 350	(2) #1 – 500	(12) 4/0 – 500	395 (179)
HLD (600A) ②④	64.00 (1625.6)	25.81 (655.6)	18.40 (467.4)	16.00 (406.4)	61.48 (1561.6)	(2) 400 – 500	(2) #1 – 500	(12) 4/0 – 500	395 (179)
HMDL (600A)	76.74 (1949.2)	25.81 (655.6)	19.50 (495.3)	16.00 (406.4)	75.17 (1909.3)	(2) #1 – 500	(2) #1 – 500	(12) 4/0 – 500	510 (232)
HMDL (800A) ②	76.74 (1949.2)	25.81 (655.6)	19.50 (495.3)	16.00 (406.4)	75.17 (1909.3)	(3) 3/0 – 400	(3) 3/0 – 400	(12) 4/0 – 500	510 (232)
NB (800 – 1000A)	76.74 (1949.2)	25.81 (655.6)	19.50 (495.3)	16.00 (406.4)	75.17 (1909.3)	(4) 4/0 – 500	(4) 4/0 – 500	(12) 4/0 – 500	570 (259)

① Suitable for Cu or Al wire. Consult the factory for other available terminal sizes.
② AGSWITCH only.
③ GENSWITCH only.
④ Alternate line terminals.



Front View Side View

For more information on Eaton Electrical Cutler-Hammer Backup Power Systems products and services, contact your local sales representative or visit our web site at www.eatonelectrical.com

Eaton Electrical
1000 Cherrington Parkway
Moon Township, PA 15108
United States
tel: 1-800-525-2000
www.eatonelectrical.com

©2003 Eaton Corporation
All Rights Reserved
Printed in USA
Form No. PA01600001E
November 2003

EATON | Cutler-Hammer