



Picture shown may not reflect actual configuration

## Features

- Available 30 to 3000A
- Wide Control Voltage Range (200V-480V)
- USB port to upload/download settings
- Available Bluetooth connection and enhanced communication capabilities
- Password protection LCD HMI
- Integrated help button and menu
- Automatic Configuration Function
- UL1008, NFPA 70, 99, 101 and 110
- NEMA ICS 10
- cUL

## Cat<sup>®</sup> CG Series

The Cat<sup>®</sup> CG Automatic Transfer Switch offers open- and delayed-transfer functionality for critical emergency power applications in commercial and light industrial applications, with an enhanced feature set and LCD HMI interface.

The innovative design of the CG provides a durable mechanism that is tested up to 6,000 cycles in an assembly that weighs up to 30% less than comparable models yet offers up to 25% more wire bending space.

An innovative auto-configuration via the HMI sets electrical system parameters in seconds, minimizing on-site setup time. Premade configuration file upload is also available via USB or Bluetooth connection. Any programming changes can be done from the HMI with a few keystrokes, making commissioning quick and painless.

## Primary Functions

- Monitor normal and emergency source voltages and frequencies
- Provision of transfer & re-transfer control signals
- Provision of engine/generator start and shutdown signals
- Permit user programming of set points
- Display real time and historical information
- Permit system testing
- Store all parameters in nonvolatile memory
- Provide at-a-glance source status indication

## Specifications

### Cat CG Features

<b>System Information</b>	
Product nodes (amperes)	30, 60, 100, 125, 160, 200, 260, 400, 600, 800, 1000, 1200, 1600, 2000, 2600, 3000
Rated voltage & frequency	200-480Vac, 50/60 Hz
Phase system	Single and Three (three phase only >600A)
Number of poles	2, 3 and 4 (3 & 4 pole only >600A)
Neutral configuration	Optional Solid or Switched neutral
Product type	Open transition (I-II), Delayed Transition (I-O-II)
<b>Voltage and frequency settings</b>	
Pick up Voltage Source 1	71-99%,101-119%
Drop out Voltage Source 1 *	70-98%, 102-120%
Pick up Voltage Source 2	71-99%, 101-119%
Drop out Voltage Source 2 *	70-98%, 102-120%
Pick up Frequency Source 1	80.5-99.5%, 100.5-119.5%
Drop out Frequency Source 1	80-99%, 101-120%
Pick up Frequency Source 2	80.5-99.5%, 100.5-119.5%
Drop out Frequency Source 2	80-99%, 101-120%
<b>Time delay settings</b>	
Override momentary Source 1 Outage, sec	0-60
Transfer from Source 1 to Source 2, sec	0-3600
Override momentary Source 2 Outage, sec	0-60
Transfer from Source 2 to Source 1, min	0-120
Generator stop delay, min	0-60
Center-OFF delay, sec	0-300
Pre-transfer delay S1 to S2, sec	0-300
Post-transfer delay S1 to S2, sec	0-300
Pre-transfer delay S2 to S1, sec	0-300
Post-transfer delay S2 to S1, sec	0-300
Elevator Pre-signal delay S1 to S2, sec	0-60
Elevator Pre-signal delay S2 to S1, sec	0-60
Elevator Post-signal delay S1 to S2, sec	0-60
Elevator Post-signal delay S2 to S1, sec	0-60
Load shed delay, sec	0-300
<b>Source failure detections</b>	
No voltage	yes
Undervoltage	yes
Overvoltage	yes
Phase missing	yes
Voltage unbalance	yes
Invalid frequency	yes
Incorrect phase sequence	yes

## Specifications

<b>Additional Features</b>	
Controls	LCD + keys
LED indications for ATS, S1 and S2 status	Yes
Open transition - Standard digital inputs/outputs	1/1
Delayed transition - Standard digital inputs/outputs	2/1
Programmable digital inputs/outputs	Yes
Auto config (voltage, frequency, phase system)	Yes
Source priority	Source 1/2, No priority
Manual re-transfer	Yes
In-phase monitor (synchro check)	Yes
Genset exercising: on-load, off-load	Yes
In-built power meter module	No
Load shedding	Yes
Real time clock	Yes
Event log	Yes
Predictive maintenance	No
Voltage and current harmonics measuring	No
<b>Field-mount accessories</b>	
Auxiliary contacts for position indication	Optional
Additional digital input/output contacts	Optional, adding up to 6 each
12-24 Vdc aux supply module for controller	Optional
Communication modules	Optional
<b>Connectivity capability</b>	
Modbus RTU (RS-485)	Optional
Modbus/TCP	Optional
Profibus DP	Optional
ProfiNet Yes	Optional
DeviceNet	Optional
Ethernet IP	Optional

## Specifications

### Cat CG series technical data

Criteria	Units	Switch Size			
		30-260A	400A	600-1200A	1600-3000A
Rated operational voltage	Vac	200-480			
Operating voltage range	Vac	160-576			
Rated frequency	Hz	50-60			
Rated for 'Total System Loads', or 'Motor Loads' at nameplate rating	A	Compliant			
Contact transfer time I-II, II-I (load interrupting time)	ms	<50			<100
Operating transfer time I-II, II-I	ms	<500			
Mechanical Endurance (includes cycles during OL testing)	No. of operating cycles	6050	4050	3050	2550
Suitable for applications		Utility-to Utility, or Utility-to-Generator			

### Cat CG series Coordinated Breaker Withstand and Close-on Ratings (WCR)

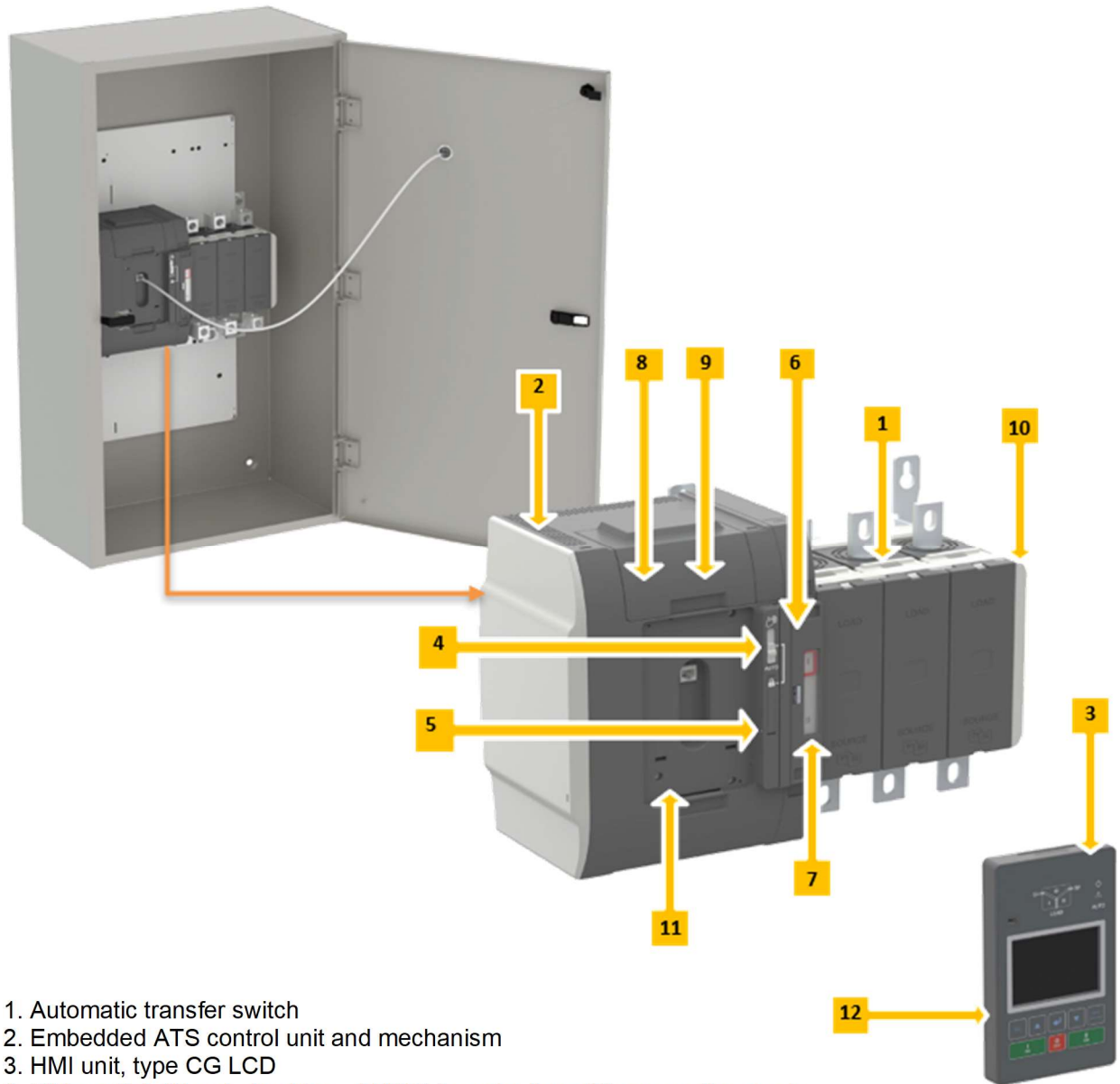
ATS Rating (A)	Max Voltage	Coordinated Breaker WCR (A) <sup>1</sup>	Breaker Manufacturers <sup>1</sup>
30 - 200	480	30000	ABB, GE, Schneider, Eaton, Siemens
260	480	35000	ABB, GE, Schneider, Eaton, Siemens
400	480	50000	ABB, GE, Schneider, Eaton, Siemens
600	480	50000	ABB, GE, Schneider, Eaton, Siemens
800 - 1200	480	65000	ABB, GE, Schneider, Eaton, Siemens
1600 - 3000	480	100000	Any

1. For a detailed list of maximum WCR ratings by ATS and breaker type, please refer to Caterpillar Publication LEHE20829

### Cat CG AL/CU UL Listed Solderless Screw-Type Terminals for External Power Connections

ATS Rating (A)	Cables per phase & neutral	Range of wire sizes
30 - 200	1	6 AWG - 300 kcmil
260	1/2	1 x 4 AWG - 600 kcmil, or 2 x 1/0 - 250 kcmil
400	1/2	1 x 4 AWG - 600 kcmil, or 2 x 1/0 - 250 kcmil
600	2	2 AWG - 600 kcmil
800 - 1200	4	2 AWG - 600 kcmil
1600 - 3000	8	2 AWG - 600 kcmil

## Units 30 to 1200A Leverage Unique Modular Construction...

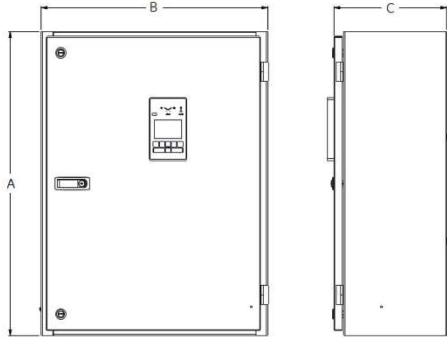


1. Automatic transfer switch
2. Embedded ATS control unit and mechanism
3. HMI unit, type CG LCD
4. Slide switch (Hand - Locking - AUTO) for selection of the operation mode
5. Padlocking the automatic transfer switch to prevent automatic and manual operation
6. Handle for manual operation
7. Position indication
8. Terminals for control circuit connections (behind the cover)
9. Place for connectivity modules (aux power supply, com and signaling)
10. Place for auxiliary contact block
11. Location of product identification label
12. Programming port, only for Ekip Programming module and Ekip Connect software

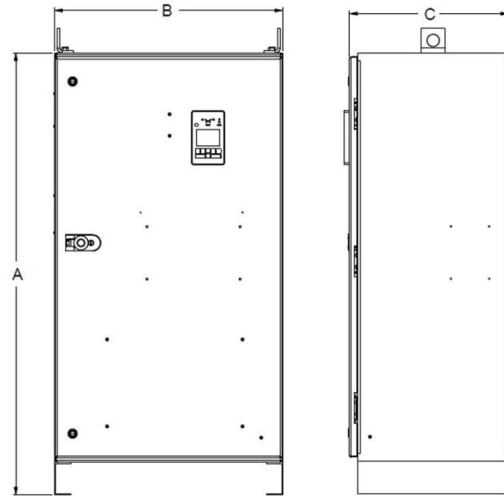
# Automatic Transfer Switch

## Weights and Dimensions

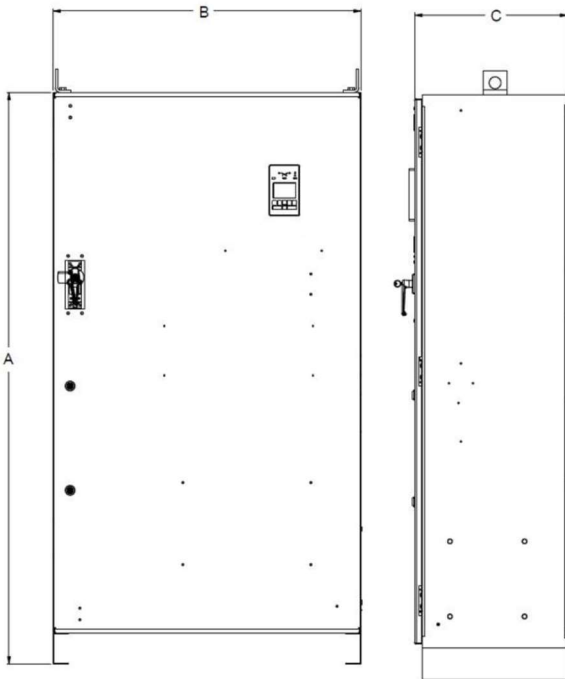
30-400 Amps



600 Amps



800-1200 Amps



CG Series dimensions and weights, UL Type 1 Enclosure

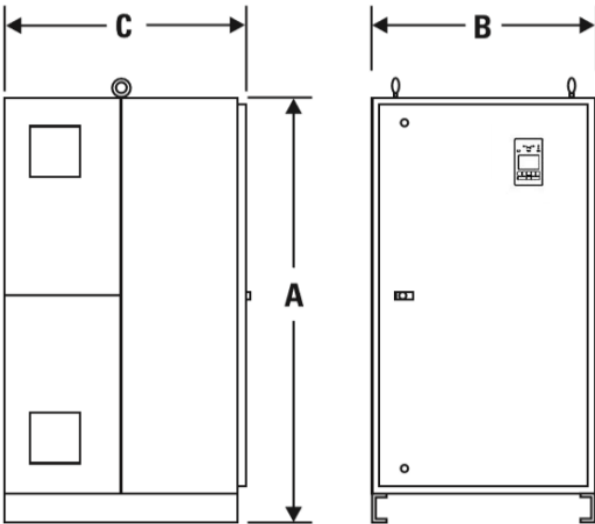
Ampere Rating	Poles	Weight <sup>1</sup> lb (kg)	Dimensions <sup>2</sup> in (mm)		
			Height (A)	Width (B)	Depth (C)
30-200	2	89 (40)	32 (813)	24 (610)	12 (305)
	3	93 (42)	32 (813)	24 (610)	12 (305)
	4	98 (44)	32 (813)	24 (610)	12 (305)
260	2	145 (66)	46 (1168)	24 (610)	14 (356)
	3	150 (68)	46 (1168)	24 (610)	14 (356)
	4	155 (70)	46 (1168)	24 (610)	14 (356)
400	2	153 (69)	46 (1168)	24 (610)	14 (356)
	3	159 (72)	46 (1168)	24 (610)	14 (356)
	4	290 (131)	54 (1372)	28 (711)	19.5 (495)
600	2	278 (126)	54 (1372)	28 (711)	19.5 (495)
	3	284 (129)	54 (1372)	28 (711)	19.5 (495)
	4	290 (131)	54 (1372)	28 (711)	19.5 (495)
800-1200	3	482 (219)	74 (1880)	40 (1016)	19.5 (495)
	4	515 (234)	74 (1880)	40 (1016)	19.5 (495)

1. Special Enclosures Type 3R, 12, 4, and 4X weights are up to 22% greater than Type 1 Enclosures
2. Special Enclosures Type 3R, 12, 4, and 4X dimensions may differ. Consult Caterpillar Switchgear Technical Support for details.
3. Packing materials must be added to weights shown. Allow 15% additional weight for cartons, skids, crates, etc.
4. All dimensions and weights are approximate and subject to change without notice.

# Automatic Transfer Switch

## Weights and Dimensions

1600 - 3000 Amps



CG Series dimensions and weights, UL Type 1 Enclosure					
Ampere Rating	Poles	Weight <sup>1</sup> lb (kg)	Dimensions <sup>2</sup> in (mm)		
			Height (A)	Width (B)	Depth (C)
1600 - 3000	3	1150 (522)	90 (2286)	35.5 (902)	48 (1219)
	4	1400 (635)	90 (2286)	35.5 (902)	48 (1219)

1. Add 3" in height for lifting eyes.
2. Special Enclosure dimensions may differ (Type 3R, 12, 4, and 4X). Consult Caterpillar for details.
3. Packing materials must be added to weights shown. Allow 15% additional weight for cartons, skids, crates, etc.
4. All dimensions and weights are approximate and subject to change without notice.

Materials and specifications are subject to change without notice.  
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