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Supersedes Price List 29-720,
pages 1-2, dated July 1, 1974,
and Supp. page .01 dated
September 26, 1974.
Mailed to: E, D, C/1901, 1908/PL

Ground Fault Protection System

Ratings

Ground Current Detection Range^⑦

5-60 or 100-1200 amps.

Voltage

Current Monitor: 600 Volts Max., 50/60
HZ Ac Only

Sensor: 40 to 120 Volts Ac or Dc^⑥

Sensor Output Switching Capacity

2.5 amps. max., Ac or Dc^⑥

Temperature Range

-20° C to 85° C

Time Delay Adjustment^②

Instantaneous to 60 Cycles

Underwriters' Laboratories, Inc.

Listing

The Ground Fault Protector is UL listed as a system including the sensor, monitor, and test panel, if used.

Application

The Ground Fault Protection System provides fast, sensitive protection against damaging low level ground faults. It is designed for use with any device that can accommodate a shunt trip.^⑥

Description

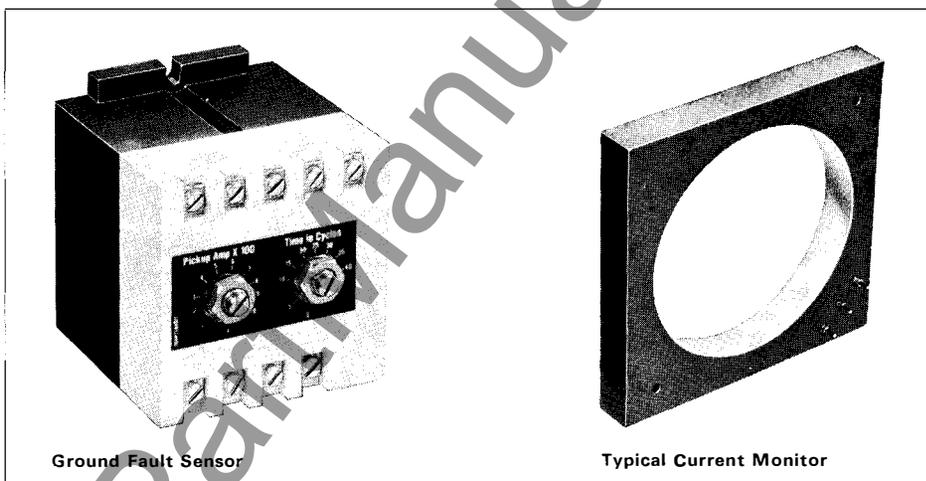
A complete Ground Fault Protection System consists of a ground fault sensor, a current monitor and a disconnect device equipped with, or capable of being equipped with, a shunt trip.^⑥

Standard ground fault sensors have adjustable current detection and time delay ranges. One sensor has a ground fault current detection range of 5 to 60 amperes, the other a range of 100 to 1200 amperes. Both sensors have an adjustable time delay range from instantaneous to 60 cycles.

Sensors are available with special circuitry to interlock several sensors within the same system.^⑩ This allows the sensor which detects a ground fault to instantly clear the fault by tripping the circuit protective device. The sensor simultaneously sends a signal to sensor units "upstream" from the fault to time delay or to block their operation completely.

Current monitors in various designs provide a range of "window" sizes to accommodate standard bus and cable arrangements.

Shunt trip attachments may be ordered for field mounting in Westinghouse molded case circuit breakers, or may be ordered factory installed in the breaker.



Selection Data List Prices: See Price List 29-020 P WE A Discount CB-7

Sensor Units

Sensor Type	Ground Fault Current Detection Range ^⑦	Time Delay Range ^②	Style Number
Standard Sensors			
GFP 60	5-60 Amps.	Instant. to 60 Cycles	179C708G06
GFP 1200	100-1200 Amps.	Instant. to 60 Cycles	179C708G08
Sensors with Interlocking Circuitry^⑩			
GFP 60A	5-60 Amps.	Instant. to 60 Cycles	179C708G05
GFP 1200A	100-1200 Amps.	Instant. to 60 Cycles	179C708G07

Current Monitors

Window Size	Style Number
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Used With Sensors Rated 5-60 Amperes	
2½ In. I.D.	179C768H01
5½ In. I.D.	1256C13H01
8½ In. I.D.	179C767H01
8 x 11 In. Rect. ^②	1257C88G02
3 x 18 In. Rect. ^②	1252C94H01
3 x 25 In. Rect. ^②	1257C92G01
6¾ x 29½ In. Rect. ^②	1255C39H01

Used With Sensors Rated 100-1200 Amperes	
2½ In. I.D.	179C768H02
5½ In. I.D.	1256C13H02
8½ In. I.D.	179C767H02
8 x 11 In. Rect. ^②	1257C88G01
10 x 17 In. Rect. ^②	1257C90G01
10 x 24 In. Rect. ^②	1257C91G01
16 x 20 In. Rect.	5684D99H01
3 x 18 In. Rect. ^②	1257C93G02
3 x 25 In. Rect. ^②	1257C92G02
5 x 36 In. Rect. ^②	1257C94G01
6¾ x 29½ In. Rect. ^②	1255C39H02

Stunt Trip Attachments Discount CB-2

120 Volt, 60 Hz Ac for field mounting in Westinghouse molded case circuit breakers^{③④}.

Type Breaker	Style Number
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For Right Hand Mounting	
EB, EHB, FB, HFB ^④	2609D39G19
JB, KB, HKB	2609D42G19
DA, JA, KA, HKA, LB, LBB, HLB	2605D15G19
LAB, LA, HLA	2606D56G19
MA, HMA	2606D57G19
NB, HNB	2606D58G19
PB	2606D59G19

For Left Hand Mounting	
EB, EHB, FB, HFB ^{④⑤}	2609D39G05
JB, KB, HKB	2609D42G05
DA, JA, KA, HKA, LB, LBB, HLB	2605D15G05
LAB, LA, HLA	2606D56G05
MA, HMA	2606D57G05
NB, HNB	2606D58G05
PB	2606D59G05
LC, HLC	2609D30G10
MC, HMC	2609D10G10
NC, HNC	2609D11G10
PC, PCC	2609D12G10

- ② One end removable for installation.
- ③ May be factory installed in breaker. See Technical Data 29-120 T WE A.
- ④ Thermal magnetic breakers only.
- ⑤ Three pole breakers only.
- ⑥ Select shunt trip to match voltage to be used with sensor as they operate from same source. (Must be 120/60 if test panel is used.)
- ⑦ Refer to Westinghouse for special time and current ranges.

- ⑧ Refer to 29-120 T WE A for UL status.
- ⑨ Sensors are available up to 4 amps continuous. Refer to Westinghouse.
- ⑩ A maximum of 4 sensors can be interlocked in one circuit.



Accessories

Test Panel (For 120 Volts Ac Only)

Used to test the ground fault system, to give an indication the sensor has tripped the breaker, and to reset the sensor after tripping. These functions may be separately mounted pilot devices. See AD 29-760.

Style Number: 1254C03G01 Dis. CB-7

Ground Fault Warning Indicator[Ⓜ]

This is an accessory item for use with GFP sensors with interlocking circuitry. At approximately 30-50% of the sensor pickup setting, the indicator switches separate 120 volt Ac control power to a lamp or relay, (not included) to give an indication of a ground fault. The indicator is rated 110/120 volts Ac 50/60 Hz for a maximum indicator load of .5 amps. This indicator does not interfere with the normal GFP installation or tripping. The indicator must be reset after operation by interrupting the 120 volt control power to the indicator. (Pushbutton or switch not included).

Style No. 1255C32G02 Dis. CB-7

Ground Fault Warning Indicator[Ⓜ]

Similar to unit listed above except it is self-resetting when ground fault condition is corrected. Also used as an amplifier unit when connecting more than four interlocked sensors to the same main sensor. (Request diagram from Westinghouse.)

Style No. 1255C32G04 Dis. CB-7

Indicating Ammeter[Ⓜ]

The indicating ammeter is an accessory item for use with the GFP system. It connects to the monitor terminals, thru a momentary contact pushbutton, and will indicate in amperes any ground fault current flowing through the monitor. The kit includes the ammeter and pushbutton.

GFP System Used With	Kit Style Number
50-60 Amp	1255C51 G02
100-1200 Amp	1255C51 G03

Discount CB-7

Ⓜ Select shunt trip to match voltage to be used with sensor as they operate from same source. (Must be 120/60 if test panel is used.)

Ⓜ Not Underwriter's Laboratories, Inc. listed.

Ordering Information

Each installation requires:

1. One sensor unit (select trip amp. as req.)
2. One current monitor (select configuration req.)
3. One circuit breaker or disconnect device with shunt trip, or a shunt trip attachment for mounting in existing breaker ①
4. Test panel, or separate pilot device, to reset sensor after tripping.

Further Information

List Prices: Price List 29-020 P WE A

Application: Application Data 29-760

Dimensions: Dimension Sheet 29-770