



October, 1975

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^①
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^②

Sensor Output Switching Capacity
2.5 amps. max., Ac or Dc^③

Temperature Range
-20° C to 85° C

Time Delay Adjustment^④
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 pro-
vides fast, sensitive protection against dam-
aging low level ground faults. It is designed
for use with any device that can accomo-
date a shunt trip.^⑤

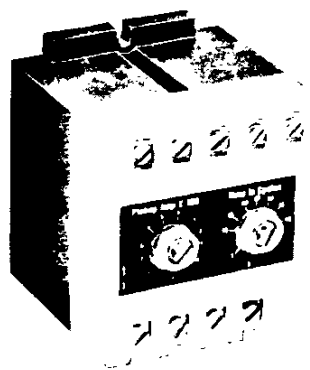
Description

A complete Ground Fault Protection Sys-
tem consists of a ground fault sensor, a cur-
rent monitor and a disconnect device equip-
ped with, or capable of being equipped
with, a shunt trip.^⑥

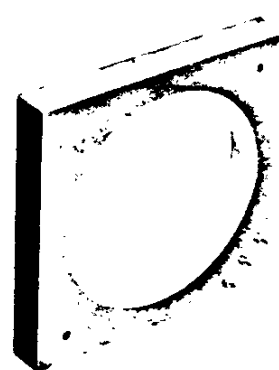
Standard ground fault sensors have adjust-
able current detection and time delay ranges.
One sensor has a ground fault current de-
tection range of 5 to 60 amperes, the other
a range of 100 to 1200 amperes. Both sen-
sors have an adjustable time delay range
from instantaneous to 60 cycles.

Sensors are available with special circuitry to
interlock several sensors within the same sys-
tem.^⑦ 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 sen-
sor 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.



Ground Fault Sensor



Typical Current Monitor

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

Sensor Units

Sensor Type	Ground Fault Current Detection Range ^①	Time Delay Range ^④	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^⑦			
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
Used With Sensors Rated 5-60 Amperes	
2 1/2 in. I.D.	179C768H01
5 in. I.D.	1256C13H01
8 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
6 1/2 x 29 in. Rect. ^②	1255C39H01
Used With Sensors Rated 100-1200 Amperes	
2 1/2 in. I.D.	179C768H02
5 in. I.D.	1256C13H02
8 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
6 1/2 x 29 in. Rect. ^②	1255C39H02

Shunt Trip Attachments Discount CB-2

120 Volt, 60 Hz Ac for field mounting in West-
inghouse molded case circuit breakers^{③ ④}.

Type Breaker	Style Number
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 ^{④ ⑤}	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 cur-
rent ranges.

- ① Refer to 29-120 T WE A for UL status.
② Sensors are available up to 4 amps continuous.
Refer to Westinghouse.
③ 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 Indicator②

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 Indicator③

Similar to unit listed above except it is self-setting when ground fault condition is detected. 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 Ammeter②

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	1255C51G02
100-1200 Amp	1255C51G03

Discount CB-7

① 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.)

② 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 PWE A

Application: Application Data 29-760

Dimensions: Dimension Sheet 29-770