



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^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 pro-
vides fast, sensitive protection against dam-
aging low level ground faults. It is designed
for use with any device that can accommo-
date a shunt trip.^⑥

Description

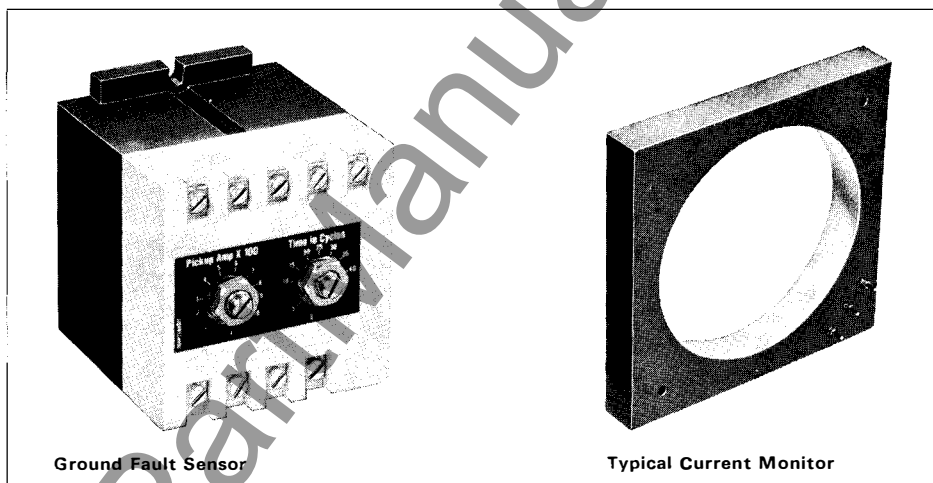
A complete Ground Fault Protection Sys-
tem consists of a ground fault sensor, a cur-
rent monitor and a disconnect device equip-
ped with, or capable of being equipped
with, a shunt trip.^⑥

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.^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 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.



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 ^⑦ | 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 |
|--|--------------|
| Used With Sensors Rated 5-60 Amperes | |
| 2½ In. I.D. | 179C768H01 |
| 5½ In. I.D. | 1256C13H01 |
| 8¼ 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 |
| 6¼ x 29½ In. Rect. ^② | 1255C39H01 |
| Used With Sensors Rated 100-1200 Amperes | |
| 2½ In. I.D. | 179C768H02 |
| 5½ In. I.D. | 1256C13H02 |
| 8¼ 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 |
| 6¼ 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 |
| 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^②

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^②

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^②

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.

Westinghouse Electric Corporation
Low Voltage Breaker Division
Beaver, Pennsylvania 15009

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 PWEA

Application: Application Data 29-760

Dimensions: Dimension Sheet 29-770