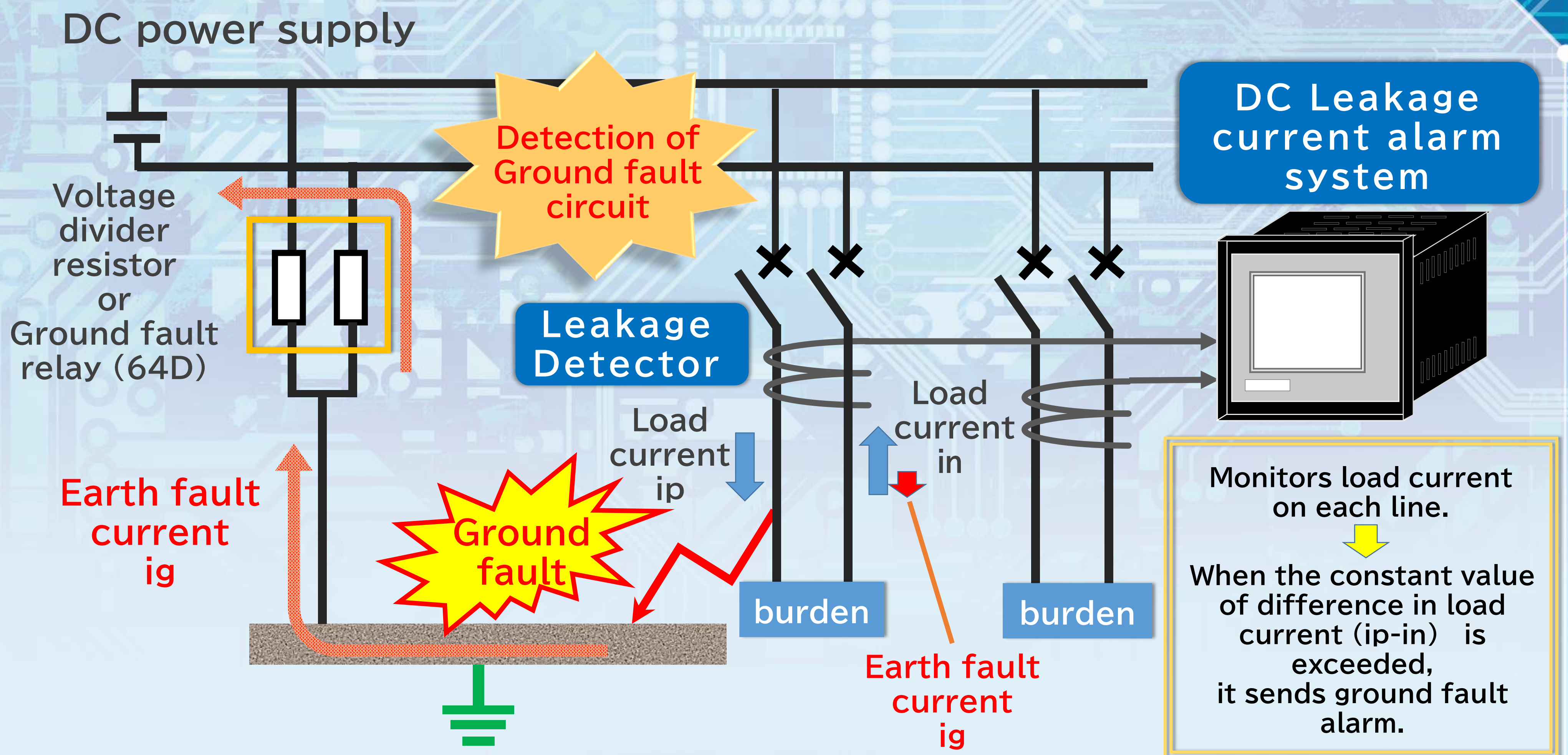


DC Leakage Current Alarm System

This system constantly monitors the DC control circuits of power plants and substations, etc., and detects ground faults on a circuit-by-circuit basis.

It detects, displays, and transmits warnings for earliest fault recovery. It also has circuit insulation diagnosis function.



Purpose and role of system/equipment

The ground fault relay (64D) can detect ground faults on the P or N side of the DC power supply, but it cannot detect which line is involved in a ground fault. This device monitors the difference in load currents on each line to detect which line is involved in a ground fault. This identification makes it possible to help in the early restoration of DC control circuits.

Continuously monitors DC power supply for ground faults

The load current of the DC power supply is constantly monitored. If the difference in load current is greater than a set value (2 mA or more), it is detected as a ground fault, and an indication and alarm are sent out.

Accident records, etc. are automatically saved to USB memory and can be viewed as CSV files.

Insulation diagnosis function in live wire condition (leakage current check)

The insulation status of the monitored circuit (1mA or more) can be checked with the DC main circuit.

Batch monitoring of multiple circuits

One single actuator can monitor two power sources and up to 128 leakage current circuits. (In the case of YGF-M2 type)

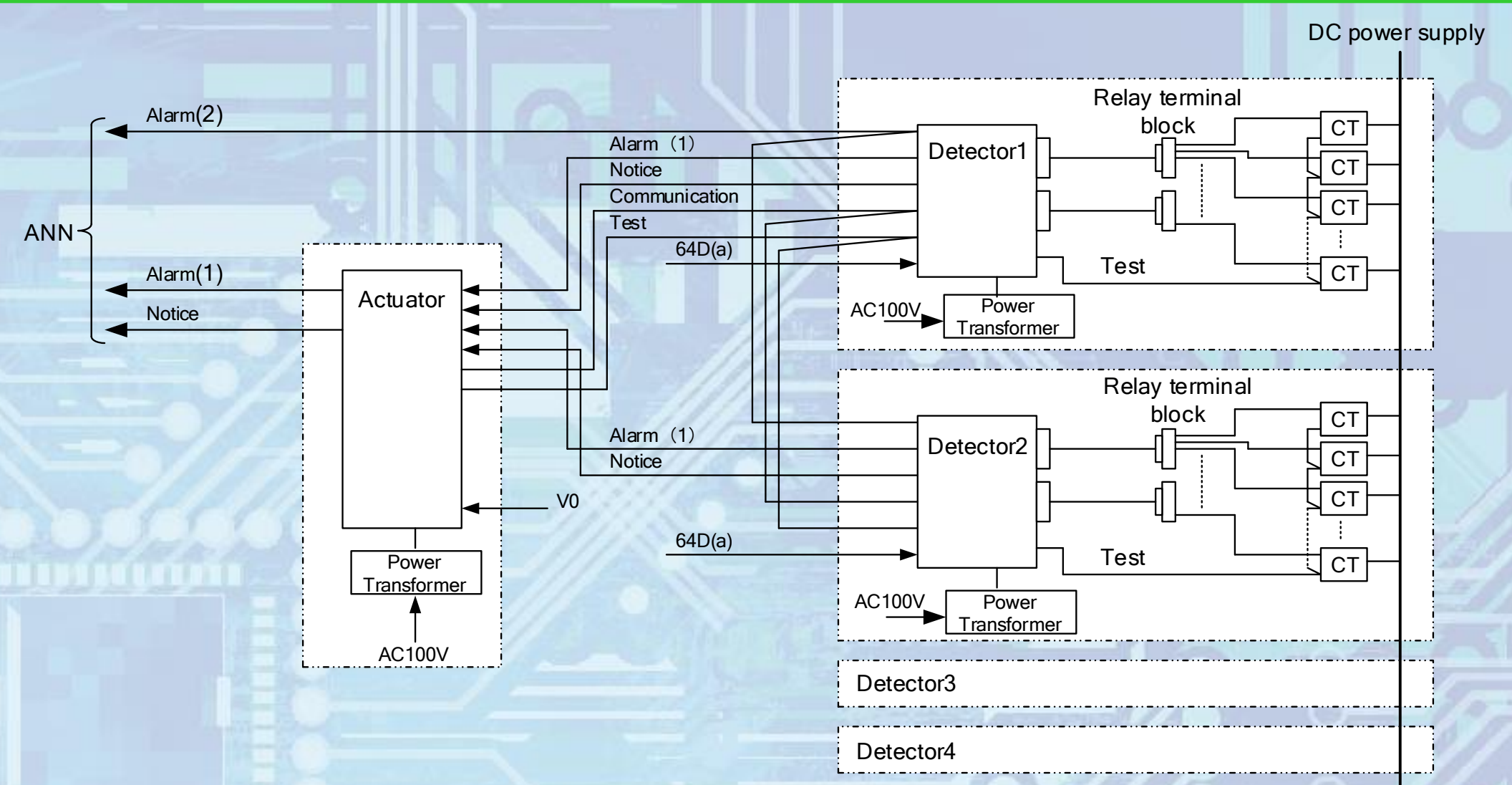
Equipment has self-monitoring function

It is equipped with a constant self-monitoring function to minimize maintenance.



Basic Specifications

Control method	Microcomputer-controlled digital type
Detection sensitivity	2mA (during monitoring), 1mA (during insulation diagnosis)
Resolution	0.03mA
Response speed	1 to 3 seconds (when ground fault current of 200% of set current occurs)
Control power supply	AC100 to 120V 50/60Hz
Operating temperature	0 to 40°C
Structure	Switchboard-mounted type



System configuration (YGF-M2 type)

Specifications : YGF-M2 type (for large-scale (multi-circuit) facilities) *Max. 128 circuits

Name of device	Model	Dimensions W x H x D (mm)	Mass (kg)
Actuator	YGF-M2TB-1	440 x 290 x 249.5	15.9
Detector	YGF-M2K-1	440 x 320 x 290	16.9
Relay terminal block	TBG-1	240 x 140 x 67	1.0
Power Transformer	ATP-1	92 x 85 x 128	2.0
	ATP-2	140 x 100 x 157	6.0



YGF-M2TB-1



YGF-M2K-1

Specifications : YGF-M3 type (for small-scale (small circuit) facilities) *Max. 16 circuits

Name of device	Model	Dimensions W x H x D (mm)	Mass (kg)
DC current leakage alarm system	YGF-M3TB-1	440 x 290 x 378	22.8
Power Transformer	ATP-1	92 x 85 x 128	2.0
	ATP-2	140 x 100 x 157	6.0



YGF-M3TB-1

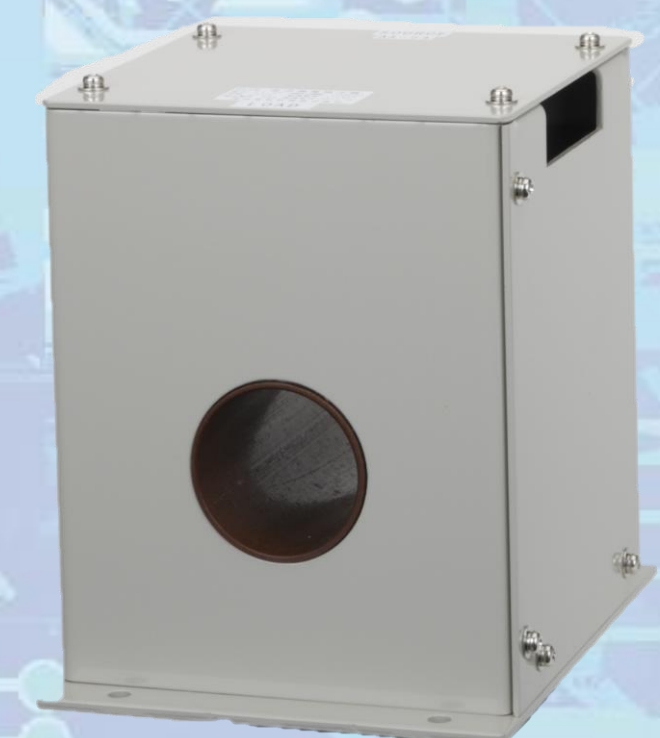
Specifications: Leakage current detector

Model	Rated value	Dimensions W x H x D (mm)	Through hole	Mass (kg)
CTG-1S	DC 30A	50 x 66.5 x 75	Φ15mm	0.3
CTG-2S	DC 100A	66 x 83.5 x 77	Φ27mm	0.5
CT-6F	DC 300A	145 x 180 x 180	Φ50mm	5.2
CT-6B	DC 600A	145 x 180 x 500	※6×35mm ²	8.9

※through-hole bare copper strip



CTG-1S



CT-6F

