

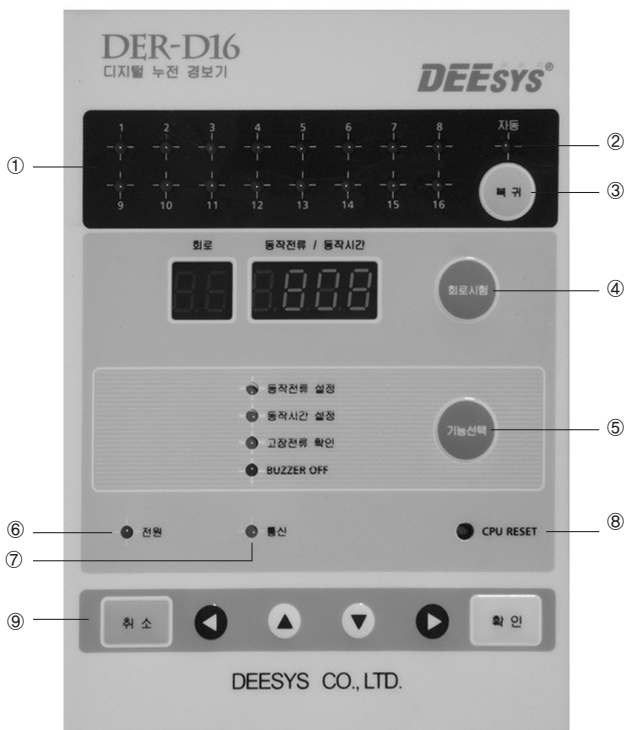
DIGITAL EARTH LEAKAGE DETECTOR & RELAY



Features

- Earth Leakage Detector and Relay check leakage due to poor isolate of electric equipment on load from AC circuit (below 600V) in advance and so take precautions against fire.
- This Digital Earth Leakage Detector and Relay (8C or 16C) check leakage and have a function to trip the circuit Breaker.
- control and monitoring protection relay through RS-485 comm. Function and Monitoring Program.
- One product cover max. 16C(Two Type(8C and 16C).
- It can be used exiting panel because cutting size is same , do not need additional work.
- This have RTC Module and so manage and store fault data through RS 485 comm. Monitoring Program.

Name Plate (Front Panel)



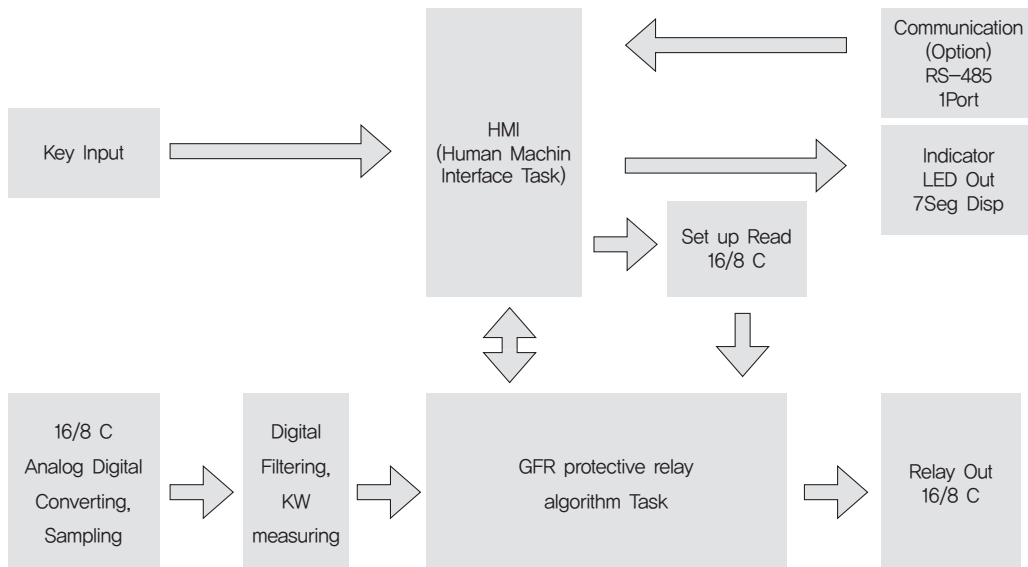
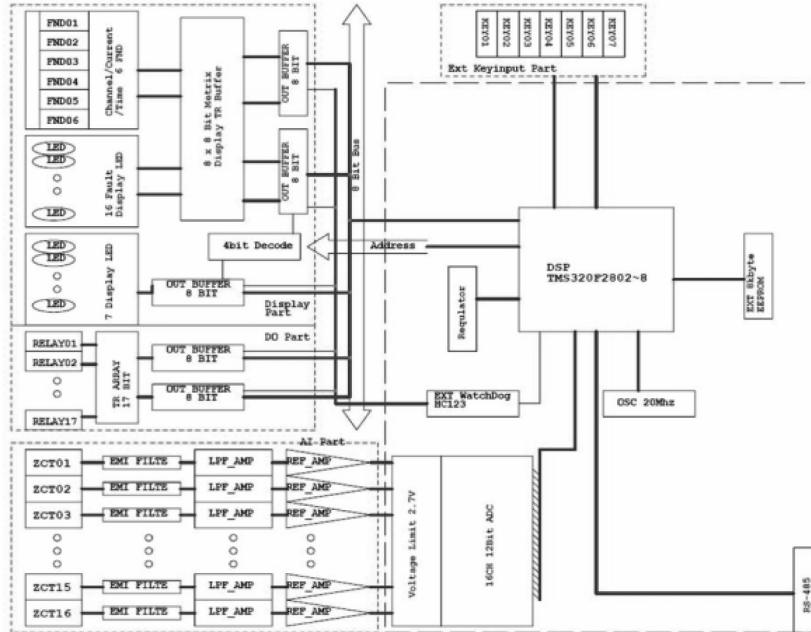
- ① Alarm Lamp [RED]
Light a lamp of the channel which is happened, when ground fault on each circuit is acted, display fault value on FND. The lamp is reset by manual, however, reset to auto if set on auto,
- ② Auto Lamp [RED]
Display auto reset of Alarm lamp and output point and can set using Menu Key.
- ③ Alarm Reset Key
set alarm lamp using manual key if not set using auto key, while not reset if not release fault current,
- ④ Test Key
check each of the circuit and the state of the connection of ZCT, if push this key, automatically test from one to 8C(16C).
- ⑤ Menu Key
Current Set / Time Set / Fault View / set comm., / Buzzer Off
Repeat this Key, move to next step in sequence
- ⑥ Power Lamp [GREEN]
display the state of power and system
- ⑦ Comm Lamp [YELLOW]
turn on the lamp when normal comm., through RS-485.
- ⑧ CPU Reset : restart the System.
- ⑨ ESC / ◀ / ▲ / ▼ / ▶ / ENTER SWITCH
use change setting by Menu Key.
▲, ▼ increase setting value ◀, ▶ Key는 move the position,

Specifications

Environment	Acting Temp.	-10°C ~ 50°C			
	Custody Temp.	-20°C ~ 60°C			
	Relative Humidity	Below 80% [No Condensing			
	altitude	below 2,000 meters above sea level / safety place no vibrate and shock			
Control Power	Rating Frequency	50 / 60Hz [±5%]			
	Rating Volt.	AC / DC 110 ~ 220V			
	Acting Volt.	AC / DC 88 ~ 240V			
Burden	Output Volt.	DC +12V / +5V / -5V			
	Output Current	1A / 2A / 2A			
Nurden	Output Burden	Max. 50VA / [Rating : 32VA]			
ZCT	Rating	AC 200mA / 100mV			
ZCT	Output tolerance	AC 75 ~ 125mV / load resistance 2kΩ			
Display		6 Digit FND [Channel : 2Digit / Current & Time Set : 4Digit]			
Fault Memory		Display fault circuit and current value through FND in case of fault current Check recent fault current value per channel through fault current checking function Cumulative Management for fault data following fault time through RS 485 comm. Software			
Alarm Reset		LED 및 Output contact point [auto return setting function]			
Comm.		RS-485C Isolation 1Port/Protocol : Modbus RTU/comm., speed : 9,600/19,200bps			
MODEL		DED - D16	DED - D08	DER - D16	DER - D08
Input circuit		16c	8c	16c	8c
Output point	Individual contact	-	-	16a Contact	8a Contact
Output Contact	common	1a Contact			
Output Contact	Contact capa.	AC 125V, 10A / DC 30V, 10A			
Acting current	current TAP	0,1 ~ 1,0A [0,1A Step]			
Acting Current	Acting range	53% ~ 75% of each correction [average 64% Set]			
Acting time	Acting characteristics	[Definite Time]			
Acting Time	LEVER	0,05 ~ 10,00sec [0,05sec Step]			
Acting Time	Acting time tolerance	Within 0,05 ~ 0,20sec : ±25ms /within 0,20 ~ 10,00sec : ±5%			
reset	reset current	Below 52% of each correction			
Reset	Reset characteristics	[Instant Time]			
Reset	Return time	Within 100ms			
Reset	Return method	Auto / Manual			
H.M.I	KEYPAD	cancel, ◀, ▲, ▼, ▶, check, circuit test, select, return			
H.M.I	LED	green [GREEN] : power yellow [YELLOW] : set acting current / set acting time / Buzzer Off / auto red [RED] : Alarm per each circuit / check fault current			
H.M.I	BUZZER	Install to rear side [75dB / 1m], On in case of fault current is happened			
Applied standard		KOFEIS 0308			

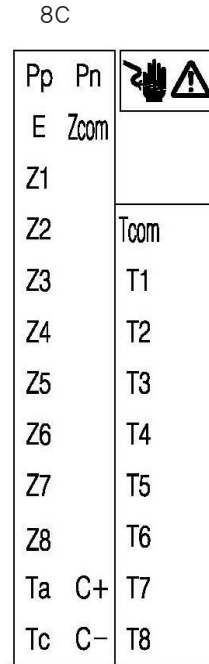
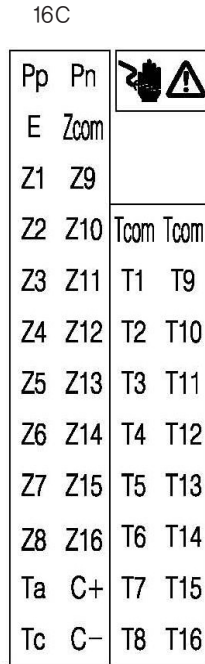
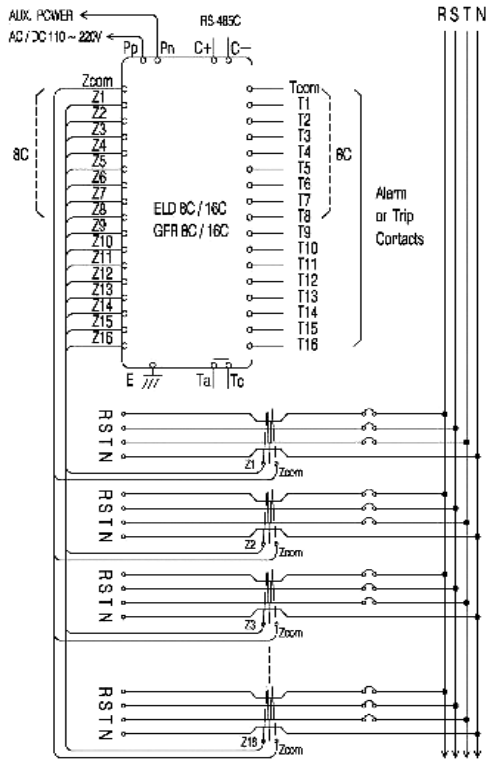
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Internal Block Diagram



External Wiring

Terminal Plate (Rear Panel)



- Pp : Control Power (+)
- Pn : Control Power (-)
- E : Earth
- C+ : RS-485 comm, port (+)
- C- : RS-485 comm, Port (-)
- Z1 ~ Z16 : ZCT Input (+)
- Zcom : Zct Input (-) (Common)
- T1 ~ T16 : Output electric contact (+)
- Tcom : Output electric contact (-) (common)
- TA : common output electric contact (+)
- TC : common output electric contact (-)

External Dimension

ELD 8C/16C GFR 8C/16C

Cutting size: 165X122mm

