

EKL series Short circuit and Earth fault indicator

EKL1B



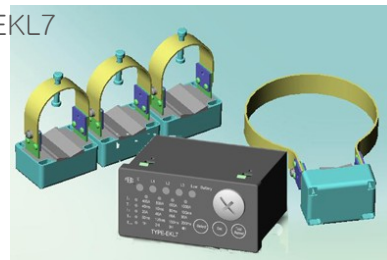
EKL3



EKL5



EKL7



General

Short Circuit and Earth Fault Indicators indicate high voltage power line short circuit fault by detecting the 3 single-phase line-currents and short circuit currents, and the grounding fault by detecting the zero sequence currents. With visual or audible indicators, it helps line patrol staff to fast find out the location where there is a short circuit or grounding fault on the 3kV-40.5kV power distribution networks, switchgears or cable branching units etc.

Short circuit fault alarm indication

Short-circuit fault sensors installed on 3 single phase cables, monitoring the current changes of the power supply lines, when the current change value reach or exceed **Threshold currents for short circuit alarm** (this value can be set as per user requirement), the short circuit fault sensors output alarm signal, through optical fiber the signal will be sent to the indicator host, the corresponding fault indicator light will flash to alarm the short circuit fault.

Earth fault alarm indication

Earth fault sensor installed on the bifurcation unshielded part of three-phase cable, detecting the zero sequence current value of the three-phase cable, when its value reach or exceed **Threshold currents for grounding fault alarm** (this value can be set as per user requirement), the earth fault sensor outputs alarm signal through optical fiber, which will be sent to the indicator host, and the earth fault indicator light will flash to alarm the earth fault.

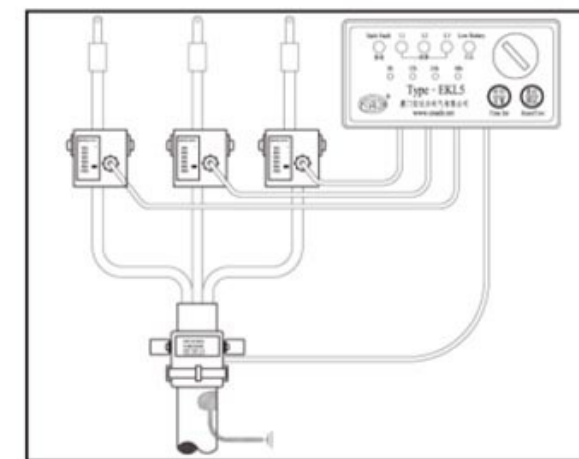
Features (Model EKL3 as example)

- Short circuit and earth fault detection with 3 single-phase current sensors, and one grounding current sensor
- Short-circuit indication (3 single phase L1,L2,L3) by three super bright LEDs respectively
- Earth fault indication by one super bright LED display
- Remote indication via 2 relay contacts
- Auxiliary power supply: 24V-230V DC/AC or built-in Li-ion battery with low-power-status indication
- Reset/Test Button
- Remote reset

For specs of other models kindly visit www.andaxingelectric.com or www.andaxing.net

Technical data (Model EKL3 as example)

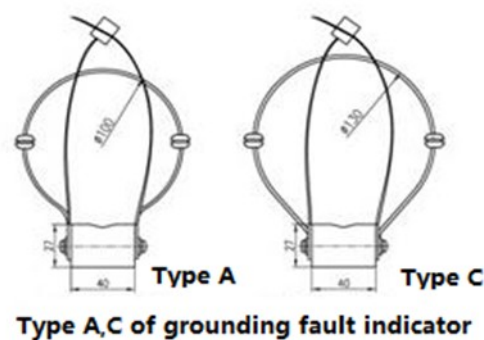
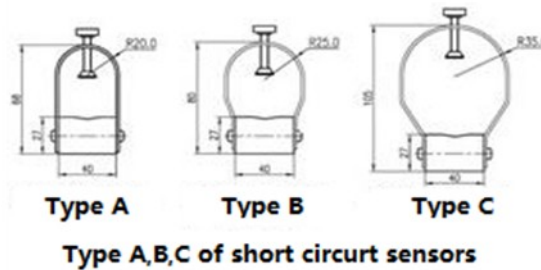
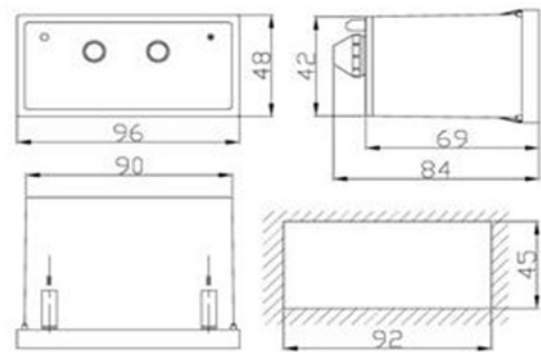
Model number	EKL3		
Voltage level	3kV-40.5kV		
Ambient	Temperature	-25°C to +70°C	
	Humidity	≤95%	
Threshold currents for short circuit alarm	150A-2000A		
Threshold currents for grounding fault alarm	10A-100A		
Alarm current accuracy	±10%		
Alarm re- sponse time	Short circuit fault	40ms	
	Grounding fault	40ms	
Working cur- rent	Stand by	≤10uA	
	Indication alarm	≤0.5mA	
Auto reset time	7s/8h/12h/24h		
Auxiliary power supply	Built-in battery	Li-ion 3.6v2.25Ah	
	External	24V-230V DC/AC	
Capacity of relay contact	2A 30VDC/1A 125VAC		
Applicable conductor diameter	Short circuit sensor	type A	Φ20mm~Φ40mm
		type B	Φ30mm~Φ50mm
		type C	Φ50mm~Φ70mm
	Grounding sensor	type A	Φ60mm~Φ100mm
type C		Φ80mm~Φ130mm	
Protection class	Indicator	IP40	
	Sensor	IP65	
Fiber cable length for short circuit sensor	1.5m can be customized		
Fiber cable length for grounding sensor	2.5m can be customized		
Panel window size (WxH)	92x45mm		
Indicator size (WxHxD)	96X48x69mm		
Sensor size (WxHxD)	40x44x27mm		



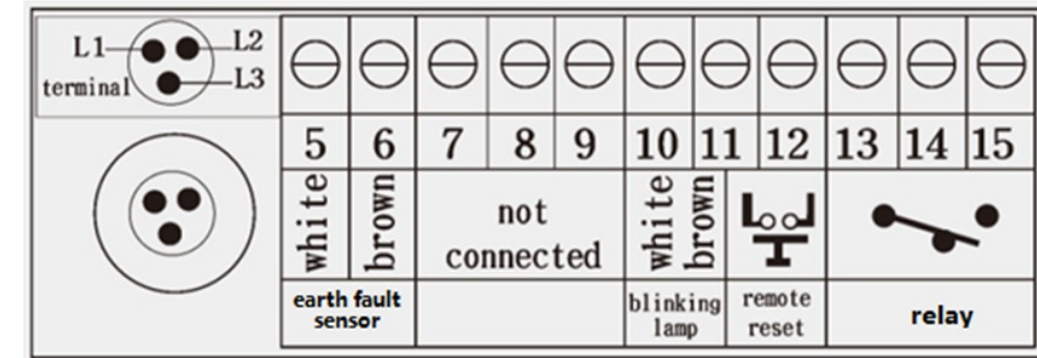
Function list of different models

Function	Short circuit alert			Earth fault alert			Auto reset	Low-power indication	Relay		
	Current adjustable	Delay time adjustable	Indication	Current adjustable	Delay time adjustable	Indication			Short circuit	Grounding	Low-power
Model											
EKL1			1			✓	✓	✓	✓		
EKL1B						✓	✓	✓		✓	
EKL2			1			✓	✓	✓	✓	✓	
EKL3			3			✓	✓	✓	✓		
EKL4			3			✓	✓	✓	✓		✓
EKL4B			3			✓	✓		✓		
EKL5			3			✓	✓	✓	✓		✓
EKL6				✓		✓	✓			✓	
EKL7	✓	✓	3	✓	✓	✓	✓	✓	✓		✓

Product Dimensions

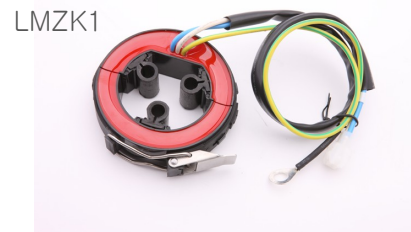


Terminal Definitions



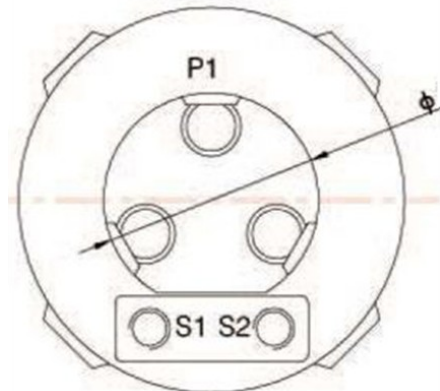
No.	Marks	Definitions
L1		Optic fiber terminal of short circuit sensor for Phase L1
L2	Terminal	Optic fiber terminal of short circuit sensor for Phase L2
L3		Optic fiber terminal of short circuit sensor for Phase L3
5	White	Earth Fault Sensor
6	Brown	
7		not connected
8		
9		
10	White	Blinking Lamp
11	Brown	
11		Remote Reset
12		
13		Common contact of fault signal remote transmission relay
14	Relay	Normally-closed contact of fault signal remote transmission relay
15		Normally-open contact of fault signal remote transmission relay

Current transformer



General

LMZK1 split core current transformer is suitable for measurement of primary current, or for protection of electrical equipments such as microcomputer in 10KV and 35KV AC power distribution networks. It is widely used in fully insulated ring network switchgears such as ABB-Safe Ring/Safe Plus...and cable distribution boxes. The transformer can be directly installed at the inlet and outlet of the GIS or AIS cables. The semicircular ring core and secondary windings are vacuum poured by insulated resin. This CT is also used for signal acquisition for RTU or FTU.



LMZK1 split core (easy to open-close type) current transformer is convenient for installation (no need to reconstruct the substation power cable networks). P1, P2 are primary polarity terminals. S1, S2 are secondary polarity terminals. P2, S2 are homonymous (minus polarity).

Features (Model LMZK1 as example)

Model	LMZK1-10
Voltage level	10kV
Rated primary current	50-600A
Rated burden	≤5VA
Rated frequency	50Hz or 60Hz
Rated secondary current	5A or 1A
Rated continuous over-current	120%I1
Insulation strength	AC 3kV, 1min
Applicable primary cable diameter	Φ20mm to φ40mm
Dimensions (d×D×H) (mm)	φ50xφ103x32
Operating temperature	-25°C to +40°C

Technical data (Model LMZK1 as example)

Model	LMZK1-10	
Voltage level	10kV	
Type	Current transformer for measurement	
Accuracy class	0.5	1
Current rating PRI:SEC Amperes	Rated burden (VA)	
300:1		2.5
400:1	2.5	3.75
500:1	2.5	5
600:1	2.5	5
300:5		2.5
400:5	2.5	3.75
500:5	2.5	5
600:5	2.5	5

ORDERING INFORMATION

LMZK1 -10 -500:1 /0.5 /2.5VA /0.5m

Model number

Voltage level: 10kV, 35kV.....

PRI:SEC current ratio

Accuracy class

Rated burden

Output cable length: 0.5m can be customized

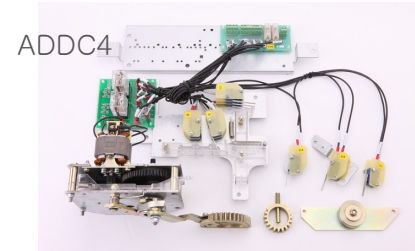
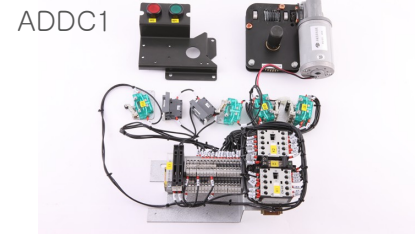
For specs of other models kindly visit www.andaxingelectric.com or www.andaxing.net

Motor gear For circuit breaker

General

Circuit Breaker Motor Gears can be used in various M.V. switchgears and ring main units. With operating motor gearbox it can store energy to make-and-break the circuit breakers of the switchgears. The system consists of motor, gear driving device, control unit and wire plug-in unit.

Remote/local switching and local make-and-break of switches
 local and remote indication of the status of load switches, earth switches and fuses
 Plug-in type of wiring makes it easy for on-site installation



Features (Model ADDC1 as example)

AD DC 1 – C / AC220 series of **Circuit Breaker Motor Gear** are applicable for modules of ABB safe cabinets. Operated by motor gear, it can store energy to make-and-break the circuit breakers of MV switchgears. Functions include Remote/local switching and local make-and-break of switches, local and remote indication of the status of load switches, earth switches and fuses.

Application example (Model ADDC1 as example)



Technical data (Model ADDC1 as example)

Rated Voltage (VDC)	Rated Power (W)	Rated Current (A)	Rate Speed (r/min)	Rated Torque (N.m)	Working Temperature (°C)	Storage time of motor (s)
220	65	0.6	180	3.45	-40 ~ +40	8±1
110		1.2				
48		2.8				
24		5.6				

For specs of other models kindly visit www.andaxingelectric.com or www.andaxing.net

Thermostat



General

KST series of small-sized **thermostat (temperature controller)** is mainly used to protect the electrical equipments against freezing in low temperature environments. It can automatically start fans or heaters and adjust temperature and humidity of the surrounding according to on-site situation. The contacts will output action indication signals, when ambient temperature is higher than pre- set temperature, the contact of controller will flip so to protect the equipments from being damaged. The thermostat is a smart controller which makes it to suit to the more complicated environment and protect the equipments more effectively.

Features

- High accuracy and wide temperature-control range;
- Small size;
- High switching performance
- Clip rail type, easy installation
- Standard: GB14536-1996 JB/T3751-1997

Make and break Temperature difference	≤7K	Lifetime	> 100 000 cycles
Temp Accuracy	±4℃	Protection Grade	IP30
Sensor	Bimetallic thermal materials	Housing Materials	UL94 V-0 light blue flame retardant plastic
ContactType	Units connect dynamically	Installation Method	35mm DIN rail (EN50022)
capacity of contact	10A 250VAC	Installation dimension	L*W 35mm*25mm
	15A 125VAC	Torque for connection terminals	0.5 Nm
Contact resistance	< 50mΩ	Wire diameter of connection terminals	Rigid conductive wire 0.5~2.5mm ²
Insulated resistance	>50MΩ		Flexible conductive wire 0.5~1.5mm ²

CFJ15 series dehumidifiers



CFJ series dehumidifiers are designed for the needs of various cabinet anti-condensation. Thermoelectric semiconductors with high thermoelectric conversion efficiency are used to make it small in size and high in dehumidification efficiency. It can effectively prevent the reduction of the insulation level of the equipment caused by condensation and adhesion on the insulation surface of equipment, so to avoid reptiles and flashover accidents caused by condensation of the switchgear cabinet.

Technical data CFJ15 series dehumidifiers

Image and size	Model	Installation	Accuracy	Control logic	Power supply
 Width x Height x depth 79 x 67 x 110.5 mm	CFJ15A01	DIN35mm lead rail or fixed installation	Temperature ±1℃ Humidity ±5%RH	Humidity>55%RH Start dehumidification	DC24V
	CFJ15B01			Humidity<45%RH Stop dehumidification	AC/DC 110V-220V
	CFJ15C01			Temperature >50℃ Or <5℃ dehumidifier will be turned off	DC48V