



PRODUCT CATALOGUE





Features

- Both latching and non-latching type of tripping contacts
- Trip starting indicator
- Relay tripped indicator
- Detection of no connection to current transformer for extra safety
- High immunity to electrical interference

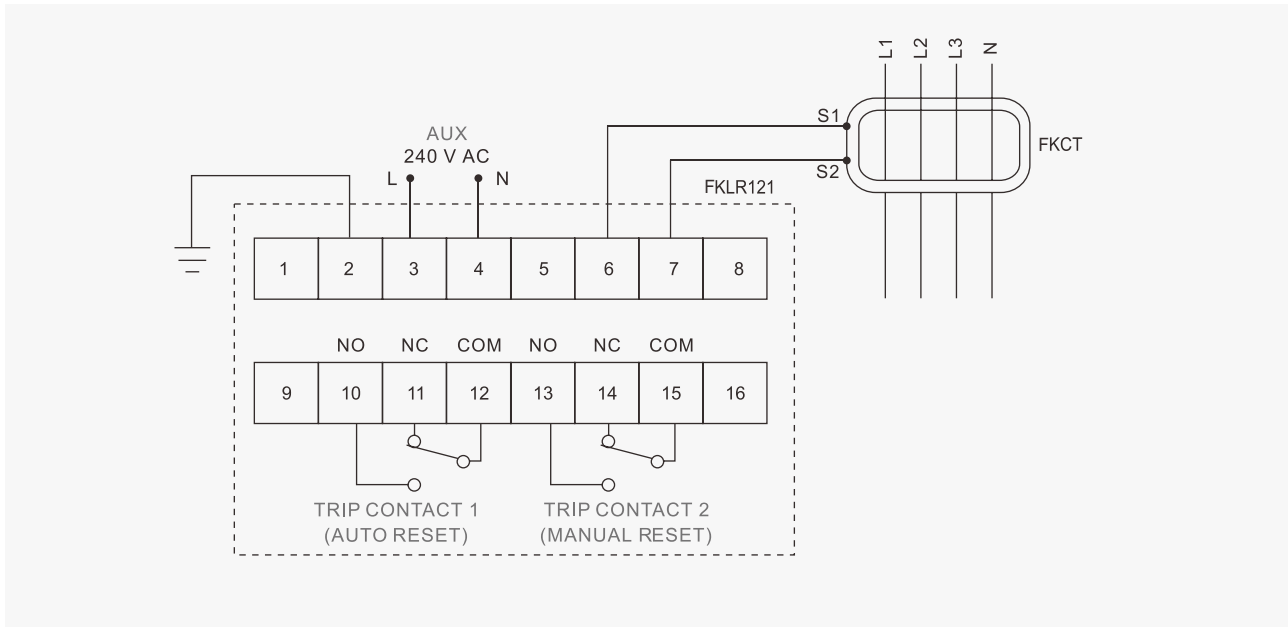
Technical Data

Settings	
Sensitivity adjustment	0.1 to 1.0 A
Delay time adjustment	0.1 sec to 3.0 sec
Contacts	
Contact arrangement	1× latching type with manual reset
	1× non-latching type with auto reset
	Both NC and NO contacts available
Contact rating	6A,250V AC ($\cos\phi = 1$) contact rating
Contact material	Silver alloy
Operating time	15 ms max.
Expected electrical life	100,000 operations at rated current
Expected mechanical life	5× 10 ⁶ operations
Auxiliary supply	
Supply voltage	198~265V AC
	90~120V AC
Rated frequency	50 or 60 Hz
VA rating	3 VA
Indicators	
Auxiliary supply	Green LED
Time delay	Red LED
Trip	Red LED
Performance	
Adjustable accuracy	Less than ± 5%.
Repeatability	Less than 0.5% of full scale.
Zero-phase current transformer	
To operate with FKCT series of current transformer	
Mechanical	
Mounting method	Panel mounted
Front panel	Standard DIN 96mm× 96mm
Weight	0.8kg (excluding FKCT)

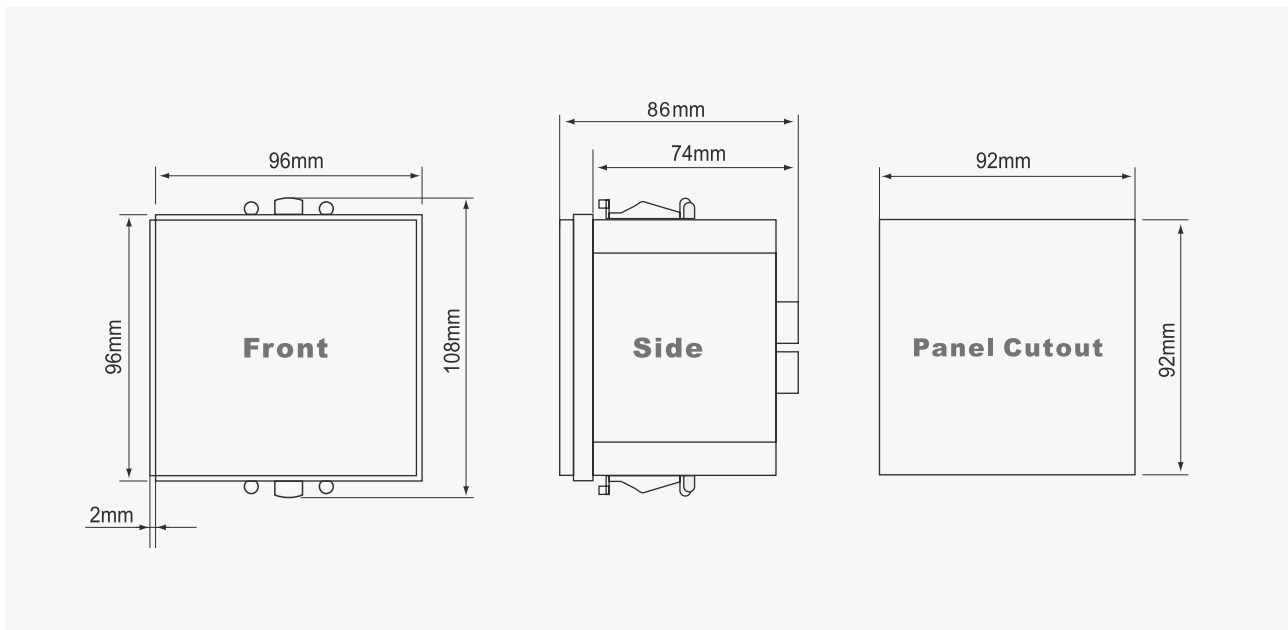
FKLR121 Earth Leakage Relay



Typical Application Diagram



Case Dimensions



Ordering Information

Model	Description
FKLR121	With 240 VAC, 50/60 Hz power supply



Technical Data

Settings	
Sensitivity adjustment	30mA, 50mA, 75mA, 100mA, 125mA, 150mA, 200mA, 250mA, 300mA, 500mA, 750mA, 1A, 1.25A, 1.5A, 2A, 2.5A, 3A, 5A, 7.5A, 10A, 12.5A, 15A, 20A, 25A, 30A
Accuracy	+0% ~ -15%
Time delay setting	50ms, 100ms, 150ms, 250ms, 350ms, 500ms, 1s, 3s.
Accuracy	± 5%
Auxiliary supply	
Supply voltage	110V AC ± 10% or 240V 90-120VAC
Frequency	50 Hz or 60 Hz
VA rating	Less than 3 VA
Indicators	
Auxiliary supply	Green LED
Time delay	Red LED
Trip	Red LED
Leakage current*	5 red LED for leakage levels
Inputs	
Sensor	FKCT
Outputs	
Contacts (Trip / 50% pre-fault*)	
Contact arrangement	Change over
Contact rating	6A, 250VAC (cos φ = 1)
Contact material	Silver alloy
Operating time	15 ms max.
Expected electrical life	100,000 operations at rated current
Expected mechanical life	5 × 10 ⁶ operations
Mechanical	
Mounting method	Panel mounted, DIN rail mounted, Screws mounted
Weight	0.3kg

Functions

- 25 selectable sensitivity settings: 30 mA to 30 A
- 9 selectable time delays: 0 ms to 3s
- Earth leakage level indicators
- Detection of no connection to FKCT
- Relay tripped indicator
- Trip starting indicator
- Protected against nuisance tripping

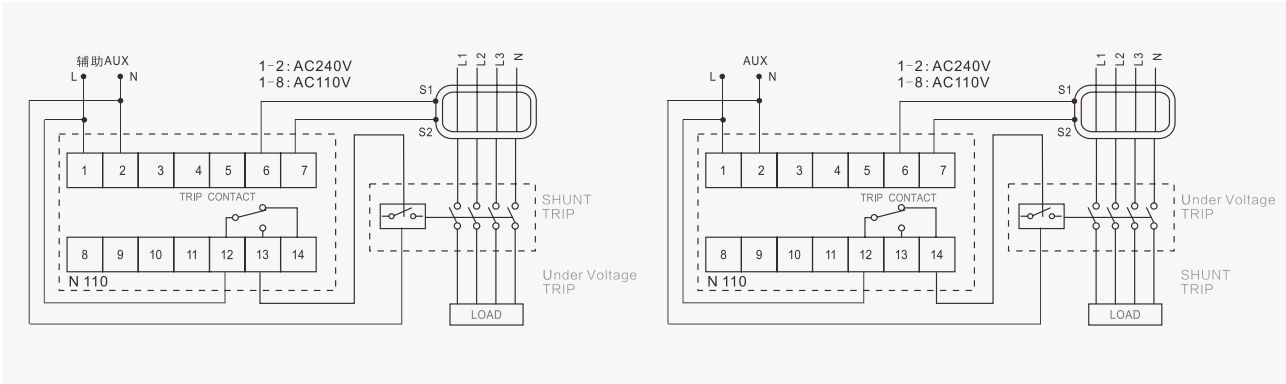


FKLR523 Earth Leakage Relay

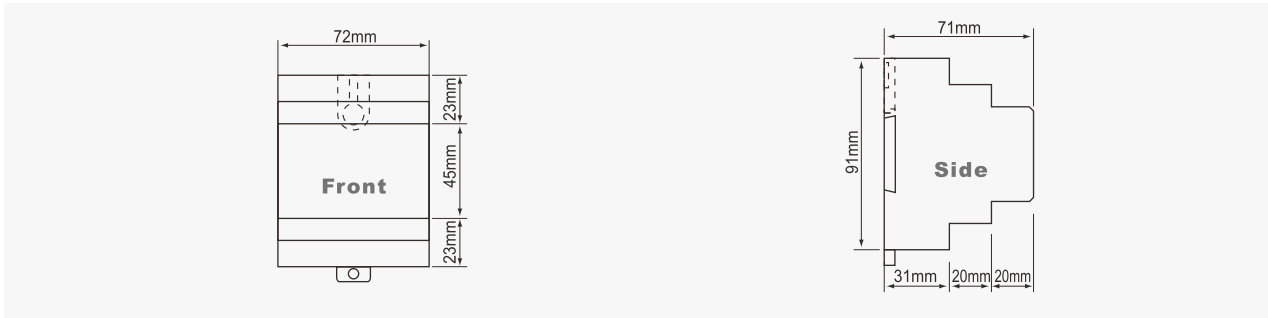


Typical Application Diagram

FKLR 523



Case Dimensions



Ordering Information

Model	Description
FKLR 523	With 240 V/110V AC, 50/60 Hz power supply



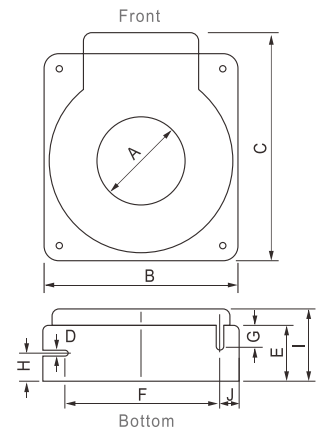
FKCT Zero-Phase Current Transformer

Technical Data

Rated Frequency	50/60HZ	
Accuracy Class	5P、10P When an external resistor in connected	
Rated turns ratio	1/210 Can be customized	
Residual current input / output voltage sensing parameters	Zero Phase(Primary/Secodary)	Rated Resistive Burden
	300mA/80mV	56Ω Installed in FKCT
	3A/80mV	5.6Ω External connection, installed in FKLR523
	30A/80mV	0.5Ω External connection, installed in FKLR523
Rated primary current	0.3A	
Rated accuracy limit primary current	3A	
Accuracy limit factor ALF	10	
Highest voltage for equipment	0.72kV	
Rated power-frequency withstand voltage	3kV	
Operating Temperature	-25 ~ +40°C	



	FKCT40	FKCT55	FKCT80
A	40	55	80
B	79	126	120.5
C	97	151	138
D	3.5	4	3.5
E	35	37	35
F	53.5	100	94.5
G	17.5	14	17.5
H	17.5	19	17.5
I	32	44	37
J	10	12.5	10



Ordering Information

Model	Inner Dia	Maximum curent feed through cable	Mounting thread size
FKCT40	40mm	250A	M3.5
FKCT55	55mm	400A	M4
FKCT80	80mm	630A	M3.5

FKCT Zero-Phase Current Transformer

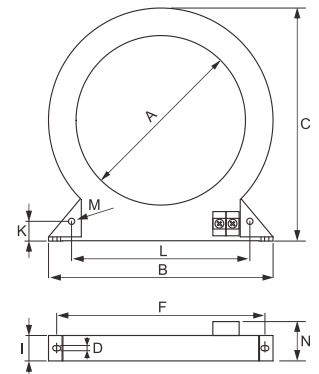


Technical Data

Rated Frequency	50/60HZ	
Accuracy Class	5P、10P When an external resistor in connected	
Rated turns ratio	1/210 Can be customized	
Residual current input / output voltage sensing parameters	Zero Phase(Primary/Secodary)	Rated Resistive Burden
	300mA/80mV	56Ω Installed in FKCT
	3A/80mV	5.6Ω External connection, installed in FKLR523
	30A/80mV	0.5Ω External connection, installed in FKLR523
Rated primary current	0.3A	
Rated accuracy limit primary current	3A	
Accuracy limit factor ALF	10	
Highest voltage for equipment	0.72kV	
Rated power-frequency withstand voltage	3kV	
Operating Temperature	-25 ~ +40°C	

Dimensions

Dimension(mm)	FKCT100	FKCT150	FKCT200
A	100	150	200
B	135	183	265
C	140	193	275
D	5	5	5
F	122	170	245
I	26	27	30
K	10	13	-
L	110	150	-
M	5	5	-
N	40	41	44



Ordering Information

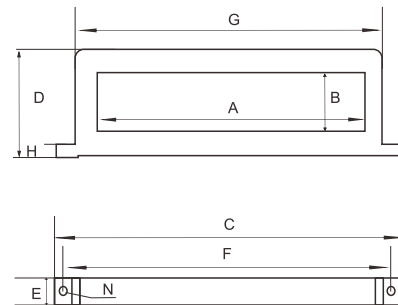
Model	Inner Dia	Maximum curent feed through cable	Mounting thread size
FKCT100	100mm	630A	M5
FKCT150	150mm	800A	M5
FKCT200	200mm	1000A	M5



FKCT Zero-Phase Current Transformer

Technical Data

Rated Frequency	50/60HZ	
Accuracy Class	5P、10P When an external resistor in connected	
Rated turns ratio	1/210 Can be customized	
Residual current input / output voltage sensing parameters	Zero Phase(Primary/Secodary)	Rated Resistive Burden
	300mA/80mV	56Ω Installed in FKCT
	3A/80mV	5.6Ω External connection, installed in FKLR523
	30A/80mV	0.5Ω External connection, installed in FKLR523
Rated primary current	0.3A	
Rated accuracy limit primary current	3A	
Accuracy limit factor ALF	10	
Highest voltage for equipment	0.72kV	
Rated power-frequency withstand voltage	3kV	
Operating Temperature	-25 ~ +40°C	



Model	Phase Current	A	B	C	D	E	F	G	H	N
FKCT1025	100	100	25	155	50	18	138	125	7	8
FKCT1432	225	140	32	203	67	23	185	173	10	8
FKCT1832	400	180	32	245	67	23	227	215	10	8
FKCT2245	630	220	45	280	83	23	265	250	10	8
FKCT2645	800	260	45	325	83	23	310	295	10	8
FKCT3045	1250	300	45	365	83	23	350	335	10	8
FKCT3445	2000	340	45	405	83	23	390	395	10	8
FKCT4045	3500	400	45	465	83	23	450	435	10	8
FKCT5045	5000	500	45	565	83	23	550	535	10	8

FKER152 Earth Fault Relay



Features

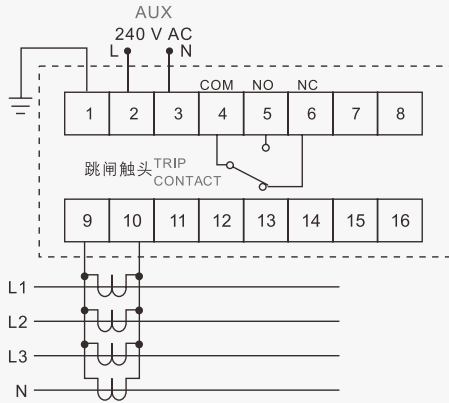
- Low-set inverse definite minimum time (IDMT) relay
- High-set instantaneous relay
- Separate low-set and high-set trip indicators
- Trip starting indication

Technical Data

Settings	
Current rating(I _n)	5A
Rated frequency	50/60 Hz
Burden	<0.3 VA at I _n
Thermal withstand	4 x I _n continuous
Auxiliary supply	
Supply voltage	198~265 V AC
Supply frequency	50/60Hz
Contacts	
Contact arrangement	Automatic reset type
Contact rating	NC & NO contact type
	6A,250V AC (cosφ =1) contact rating
	Silver alloy contact material
	100,000 electrical operations at rated current
Indicators	
Trip indicator	Manual reset type
Mechanical	
Mounting	Panel mounted, DIN rail mounted, Screws mounted
Front panel	Standard DIN 96 mm × 96 mm
Weight	0.9 kg
Performance	
Adjustable accuracy	Less than ± 5%.
Repeatability	Less than 0.5% of full scale.
Setting ranges	
Low-set (I>)	0.1 A to 2.0 A, 2% to 40%
Time multiplier	0.01 to 1.0
IDMT curve	Normal Inverse
High-set (I>>)	I> to 5 I>

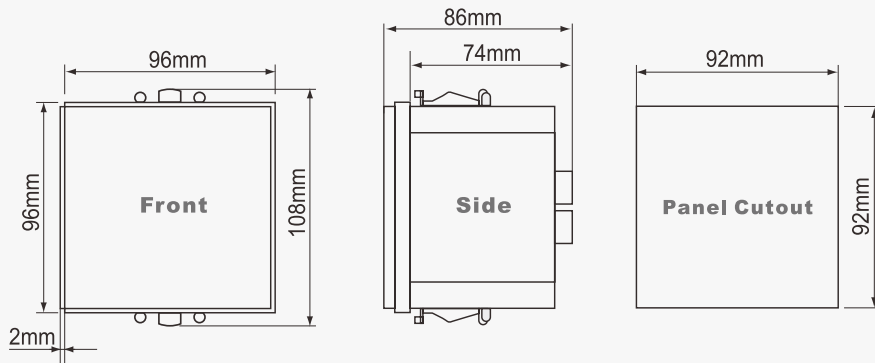
Typical application diagram

FKER152



Case Dimensions

FKER152



FKER141 Earth Fault Relay



Features

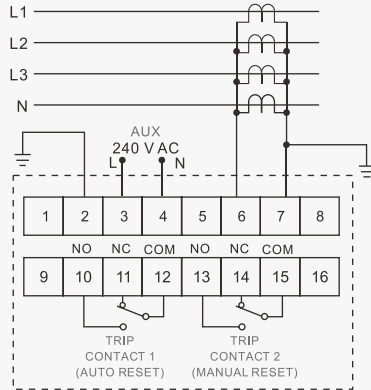
- Low-set definite time relay
 - High-set instantaneous relay
 - Separate low-set and high-set trip indicators
 - Low-set trip and pickup indicator
 - High-set trip indicator
 - Auto reset and manual reset contacts available
 - Option to disable the high-set relay
- Front panel access to the test function

Technical Data

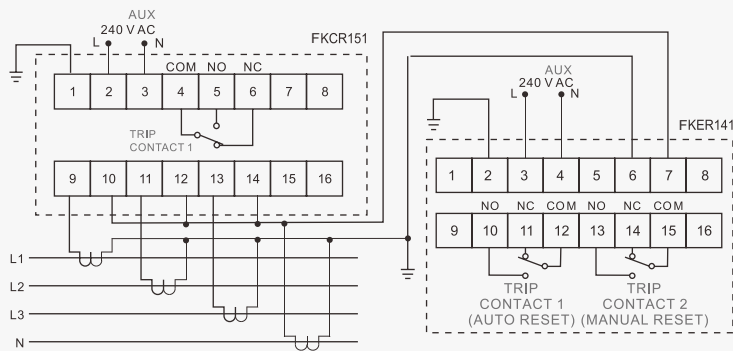
Settings	
Current rating(In)	5A
Rated frequency	50/60 Hz
Burden	<0.3 VA at In
Thermal withstand	4 x In continuous
Auxiliary supply	
Supply voltage	198~265 V AC, 90~120 V AC
Supply frequency	50/60Hz
VA rating	<3VA
Contacts	
Contact arrangement	1 × latching type with manual reset
	1 × non-latching type with auto reset
	Both NC and NO contacts available
Contact rating	6A,250V AC (cosφ =1) For tripping contact
Contact material	Silver alloy
Operating time	15 ms max.
Expected electrical life	100,000 operations at rated current
Expected mechanical life	5 × 10 ⁸ operations
Indicators	
Auxiliary supply	Green LED indicator light
Trip indicator	Manual reset type
Mechanical	
Mounting	Panel mounted, DIN rail mounted, Screws mounted
Front panel	Standard DIN 96 mm× 96 mm
Weight	0.9 kg
Performance	
Adjustable accuracy	Less than ± 5%.
Repeatability	Less than 0.5% of full scale.
Setting ranges	
Low-set (I>)	0.1 A to 2.0 A
	2% to 40%
Low-set delay time	0.01 sec to 1.0 sec
High-set(I>>)	I> to 5 x I>
High-set delay time (t >>)	Instantaneous

Typical application diagram

FKER141

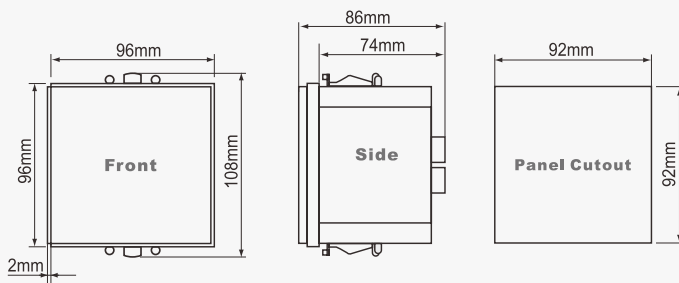


Combined IDMT overcurrent & earth fault relays



Case dimensions

FKER141



Ordering Information

Model	Description
FKER141	With 240 V AC, 50/60 Hz power supply

FKCR153 Overcurrent Relay



Features

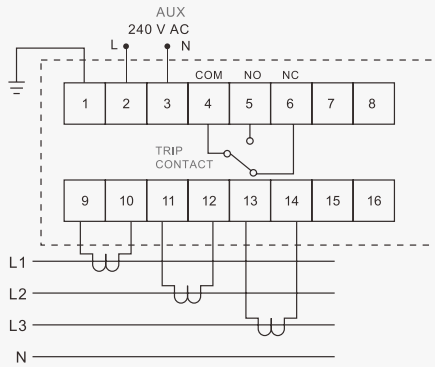
- Low-set inverse definite minimum time (IDMT) relay
- High-set instantaneous relay
- Separate low-set and high-set trip indicators
- Trip starting indication

Technical Data

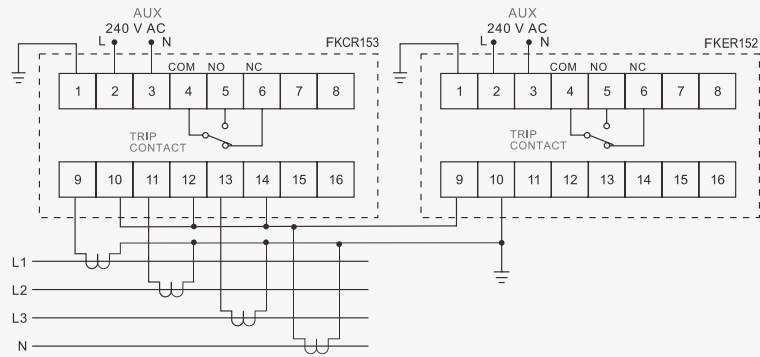
Settings	
Current rating(I _n)	5A
Rated frequency	50/60 Hz
Burden	<0.3 VA at I _n
Thermal withstand	4 x I _n continuous
Auxiliary supply	
Supply voltage	198~265 V AC
Supply frequency	50/60Hz
Contacts	
Contact arrangement	Automatic reset type
Contact rating	NC & NO contact type
	6A,250V AC (cosφ =1) contact rating
	Silver alloy contact material
	100,000 electrical operations at rated current
Indicators	
Trip indicator	Manual reset type
Mechanical	
Mounting	Panel mounted, DIN rail mounted, Screws mounted
Front panel	Standard DIN 96 mm × 96 mm
Weight	1.2 kg
Performance	
Adjustable accuracy	Less than ± 5%.
Repeatability	Less than 0.5% of full scale.
Setting ranges	
Low-set (I>)	2.0 A to 6.0 A, 40% to 120%
Time multiplier	0.01 to 1.0
IDMT curve	Normal Inverse
High-set (I>>)	I> to 5 I>

Typical application diagram

FKCR153

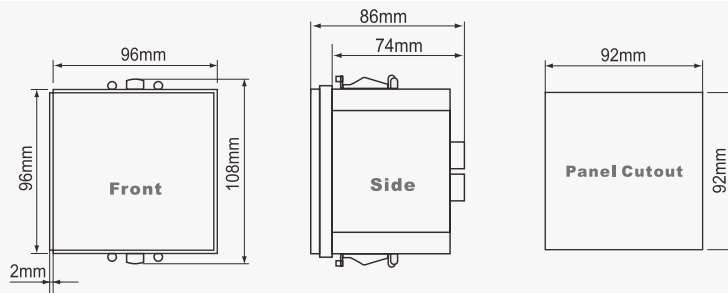


Combined IDMT overcurrent & earth fault relays



Case Dimensions

FKCR153



Ordering Information

Model	Description
FKCR153	With 240 V AC, 50/60 Hz power supply

FKCR151 Inverse Time Overcurrent Relay



Features

- Low-set inverse time relay
- High-set instantaneous relay
- Separate low-set and high-set trip indicators
- Trip starting indication

Technical Data

Settings	
Current rating(I _n)	5A
Rated frequency	50/60 Hz
Burden	<0.3 VA at I _n
Thermal withstand	4 x I _n continuous
Auxiliary supply	
Supply voltage	198~265 V AC
Supply frequency	50/60Hz
Contacts	
Contact arrangement	Automatic reset type
Contact rating	NC & NO contact type
	6A,250V AC (cosφ =1) contact rating
	Silver alloy contact material
	100,000 electrical operations at rated current
Indicators	
Trip indicator	Manual reset type
Mechanical	
Mounting	Panel mounted, DIN rail mounted, Screws mounted
Front panel	Standard DIN 96 mm × 96 mm
Weight	1.2 kg
Performance	
Adjustable accuracy	Less than ± 5%.
Repeatability	Less than 0.5% of full scale.
Setting ranges	
Low-set (I>)	2.0 A to 6.0 A, 40% to 120%
Time multiplier	0.01 to 1.0
High-set (I>>)	I> to 5 I>

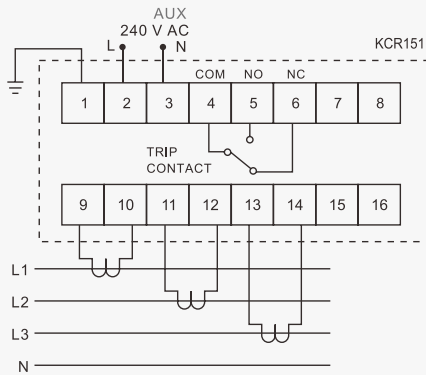


FKCR151 Inverse Time Overcurrent Relay

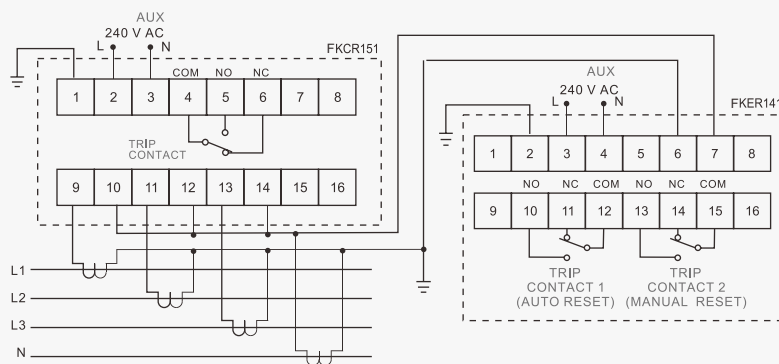
Diagram

Typical application diagram

FKCR151

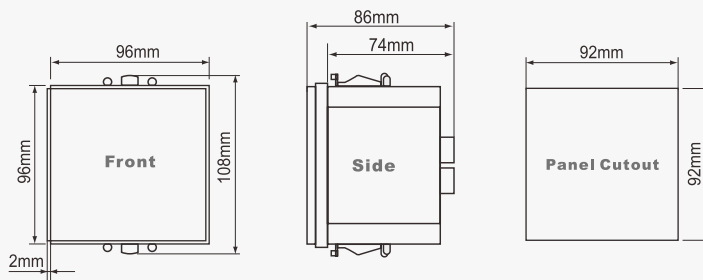


Combined IDMT overcurrent & earth fault relays



Case dimensions

FKCR151



Ordering Information

Model	Description
FKCR151	With 240 V AC, 50/60 Hz power supply

