TALEMOD

MOLDED CASE
INTELLIGENT
CIRCUIT BREAKERS

www.talemod.com

TALEMOD

TALEMOD is a professional company in low voltage circuit protection systems, integrating design, R&D, manufacturing and trading. Our main product lines include MCB, RCCB, RCBO, MCCB and distribution boards.

Optimal Solution

We are turnkey solution supplier for circuit protection. By providing quality ODM and OEM services, we expand your brand's product range and increase market share.

Top Brand's Choice

Continued innovation, consumer-focused production, and partnerships with renowned companies like legrand and bticino make Talemod the go-to brand for your brand here and abroad.

We Offer Reliable Support

Our team has years of combined experience in circuit protection expertise and with the help under seasoned supply chain, we have obtained CE, CB, SEMKO, RoHS and other authorities certification, and serving for some of the biggest brands worldwide.

Flexible Solution

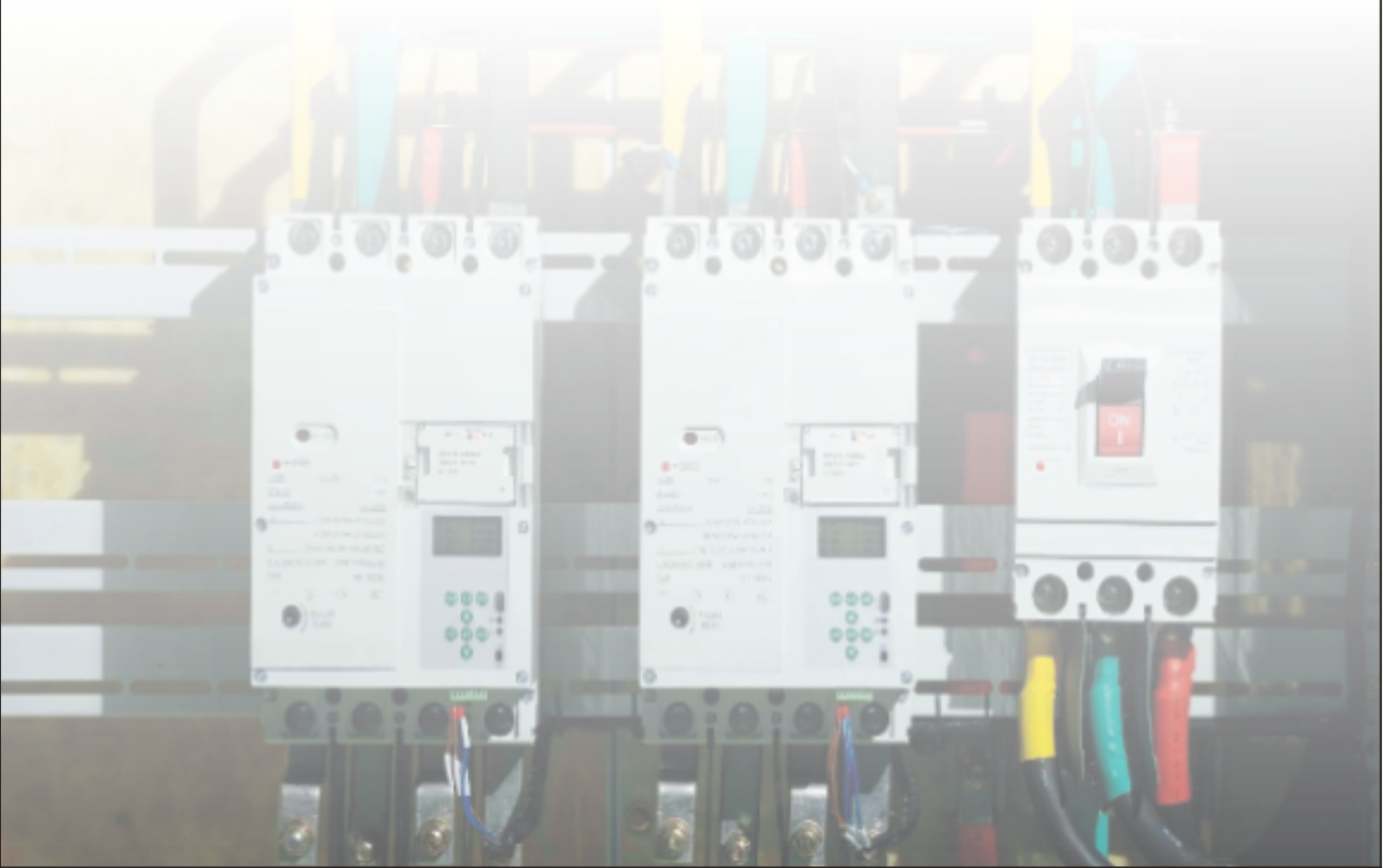
Apart from devices, we offer a complete set of consumer units, offering you a combo sales plan.

Modern Manufacturing

We apply the modern 6S manufacturing strategy to reduce product error and increase efficiency.

Attentive Service

Our expert team help you with device design, production, development and attentive after-sales service.



TALEMOD

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TDK5 MOLDED CASE CIRCUIT BREAKER

Scope of Application

TDK5 Series Molded Case Circuit Breaker (hereinafter referred to as Circuit Breaker) with rated insulation voltage of 1000V is suitable for infrequent switching and infrequent starting of motor in circuits with frequency of AC 50Hz, rated working voltage of 415V and rated working current of 800A. The circuit breaker has the functions of overload, short circuit and undervoltage protection, which can protect the circuit and power supply equipment from damage.

Circuit breaker can be installed vertically (i.e. vertically) or horizontally (i.e. transversely).

Circuit breaker has isolation function, and their corresponding symbols are: —/|×—.

Circuit breaker products shall comply with the following standards:

- IEC60947-1 and GB/T14048.1 General
- IEC60947-2 and GB/T14048.2 Low Voltage Circuit Breaker
- IEC60947-4-1 and GB/T14048.4 Electromechanical Contactors and Motor Starters
- IEC60947-5-1 and GB/T14048.5 Electromechanical Control Circuit Electrical Appliance

Model and Meaning

TD	K	5	-	125	i	M	S	Z	/	4	300	B
①	②	③		④	⑤	⑥	⑦	⑧		⑨	⑩	⑪

Serial No.	Item meaning
①	Enterprise code: TALEMOD
②	MCCB (Molded Case Circuit Breaker)
③	Design No.
④	Frame grade current (A): Inm=63, Inm=100, Inm=125i, Inm=125, Inm=160, Inm=250, Inm=400, Inm=630i, Inm=800
⑤	i: Capacity expanion current ; Conventional no code
⑥	Breaking capacity: C: Economy; S: Ordinary breaking; L: Lower breaking; M: Higher breaking
⑦	Surface cover type: S: Single-cap; Double-cap no code
⑧	Operating mode: Manual direct operation no code; Operate by rotating handle denoted by Z; Electric operation denoted by P
⑨	No. of poles: 3: three-pole; 4: four-pole
⑩	Release mode and accessory code: See table 1 and table 2
⑪	4-pole product code; 3-pole product no code

Note: 4-pole product code

- Type A: Overcurrent tripping element is not installed at N pole, and N pole is always ON and not combined with other three poles.
- Type B: Overcurrent tripping element is not installed at N pole, and N pole is combined with other three poles (N pole is combined first and then separated).

Main Technical Parameters

Model		TDK5-63 TDK5-100 TDK5-125i		TDK5-125 TDK5-160		TDK5-250		TDK5-400 TDK5-630i		TDK5-800	
Frame grade current Inm(A)		63, 100, 125i		125, 160		250		400, 630i		800	
Rated current In(A)		10, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125		16, 20, 25, 32, 40, 50, 63, 80, 100, 125, 140, 160		100, 125, 140, 160, 180, 200, 225, 250		225, 250, 315, 350, 400, 500, 630		630, 700, 800	
No. of poles		3	4	3	4	3	4	3	4	3	4
Rated insulation voltage Ui(V)		800		1000							
Rated operating voltage Ue(V)		AC400, AC415									
Rated impulse withstand voltage Uimp(kV)		8						12			
Flashover distance (mm)		50						100			
Breaking capacity level		C	S	L	M	C	S	L	M	C	S	L	M	C	S	L	M	C	S	L	M
Ultimate short-circuit breaking capacity Icu(kA)		15	25	35	50	25	35	36	50	25	35	36	50	42	50	50	70	42	50	50	70
Operating short-circuit breaking capacity Ics(kA)		10	18	21	30	15	17.5	25	36	15	18	25	36	25	25	50	70	25	36	50	70
Operational performance (times)	Powered	1500		1500		1000		1000		500	
	Not powered	8500		8500		7000		4000		2500	
	Total	10000		10000		8000		5000		3000	

Protection Characteristics

Power distribution

Rated current (A)	Thermal release (ambient temperature +40℃)		Operating current of electromagnetic release (A)
	1.05In (cold) non-operating time (h)	1.3In (hot) operating time (h)	
16≤In≤63	Non-operating within 1 hour	≤1	10A-40A: 400A ± 20% 50A-800A: 10In ± 20%
63<In≤800	Non-operating within 2 hours	≤2	

For protecting motors

Rated current (A)	Thermal release (ambient temperature +40℃)					Operating current of electromagnetic release (A)
	1.0In (cold) non-operating time (h)	1.2In (hot) operating time (h)	1.5In (hot) operating time (h)	7.2In (cold) operating time (h)	Tripping level	
10≤In≤25	Non-operating within 2 hours	≤2	≤2min	0.5s<Tp≤5s	5	10A-40A: 400A ± 20% 50A-800A: 12In ± 20%
25<In≤250			≤4min	4s<Tp≤10s	10	
250<In≤800			≤8min	6s<Tp≤20s	20	

Classification of Circuit Breakers

- Classified according to the number of poles: 3-pole and 4-pole;
- Classified according to the application: For power distribution and motor protection;
- Classified according to the operation modes: Operated by handle, electric operation (denoted by P), operated by rotating handle (denoted by Z for switchgear).

TDK5L MCCB WITH RESIDUAL CURRENT PROTECTION

Scope of Application

TDK5L Series MCCB with Residual Current Protection (hereinafter referred to as Circuit Breaker) is suitable for distribution network with a frequency of AC 50Hz, the rated working voltage of 400V, the rated insulation voltage of 1000V and the rated current of 800A. It can be used to provide indirect contact protection for people, prevent fire danger caused by grounding fault current caused by equipment insulation damage, distribute electric energy, protect overload and short circuit of lines and equipment, and also be used for infrequent switching of lines and infrequent starting of motors.

The rated residual current I△n and the maximum operating time of the rated residual current can be adjusted on site according to the actual situation; When the phase voltage is reduced to 85V, the leakage protection module can still work normally and has the function of leakage alarm output.

The products conform to IEC60947-2 and GB/T14048.2 standards.

Model and Meaning

TD	K	5	L	-	125	i	M	S	Z	/	4	300	B
①	②	③	④		⑤	⑥	⑦	⑧	⑨		⑩	⑪	⑫

Serial No.	Item meaning
①	Enterprise code: TALEMOD
②	MCCB (Molded Case Circuit Breaker)
③	Design No.
④	With residual current protection
⑤	Frame grade current (A): Inm=125, Inm=160, Inm=250, Inm=400, Inm=630i, Inm=630, Inm=800
⑥	i: Capacity expanion current ; Conventional no code
⑦	Breaking capacity: C: Economy; S: Ordinary breaking; L: Lower breaking; M: Higher breaking
⑧	Surface cover type: S: Single-cap; Double-cap no code
⑨	Operating mode: Manual direct operation no code; Operate by rotating handle denoted by Z; Electric operation denoted by P
⑩	No. of poles: 3: three-pole; 4: four-pole
⑪	Release mode and accessory code: See table 1 and table 2
⑫	4-pole product code; 3-pole product no code

Note: 4-pole product code

- Type A: Overcurrent tripping element is not installed at N pole, and N pole is always ON and not combined with other three poles.
- Type B: Overcurrent tripping element is not installed at N pole, and N pole is combined with other three poles (N pole is combined first and then separated).

Classification of Circuit Breakers

- Classified according to the number of poles: 3-pole and 4-pole;
- Classified according to the application: For power distribution and motor protection;
- Classified according to the operation modes: Operated by handle, electric operation (denoted by P), operated by rotating handle (denoted by Z for switchgear).

Main Technical Parameters

Model		TDK5L-125 TDK5L-160				TDK5L-250				TDK5L-400 TDK5L-630i				TDK5L-630 TDK5L-800			
Frame grade current Inm(A)		125, 160				250				400, 630i				800			
Rated current In(A)		16, 20, 25, 32, 40, 50, 63, 80, 100, 125, 140, 160				100, 125, 140, 160, 180, 200, 225, 250				225, 250, 315, 350, 400, 500, 630				400, 500, 630, 700, 800			
No. of poles		3		4		3		4		3		4		3		4	
Rated insulation voltage Ui(V)		1000												800			
Rated operating voltage Ue(V)		AC400															
Rated impulse withstand voltage Uimp(kV)		8															
Flashover distance (mm)		50								100							
Breaking capacity level		C	S	L	M	C	S	L	M	C	S	L	M	C	S	L	M
Ultimate short-circuit breaking capacity Icu(kA)		25	30	36	50	25	30	36	50	42	50	50	70	42	50	50	70
Operating short-circuit breaking capacity Ics(kA)		15	15	25	36	15	15	25	36	25	25	50	70	25	36	50	70
Rated residual operating current I△n (mA)		100/300/ 500												300/500/1000			
Rated residual non-operating current I△no(mA)		1/2I△n															
Residual current protection operation time		I△n	2I△n	5I△n	10I△n	I△n	2I△n	5I△n	10I△n	I△n	2I△n	5I△n	10I△n	I△n	2I△n	5I△n	10I△n
Maximum breaking time (s)	Non-delay type	0.3	0.15	0.04	0.04	0.3	0.15	0.04	0.04	0.3	0.15	0.04	0.04	0.3	0.15	0.04	0.04
	Delay time	0.4/1															
Operational performance (times)	Powered	1500				1000				1000				1000			
	Not powered	8500				7000				4000				4000			
	Total	10000				8000				5000				5000			

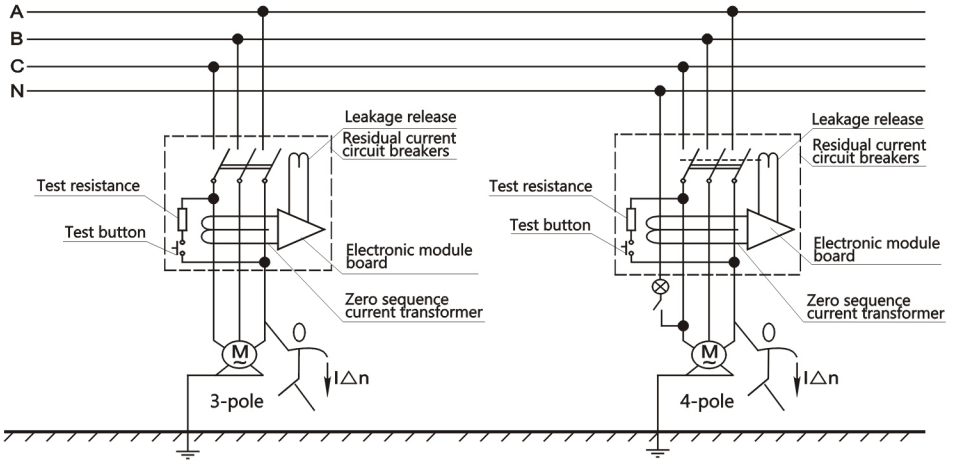
Structure and Working Principle

Structure

The series of circuit breakers are electronic current-operated leakage protectors. The main components include main switch (including over -current release), zero-sequence current transformer, electronic amplification components, leakage release, test device, all of which are installed in a plastic housing.

Working principle

In case of any leakage or electric shock in the protected circuit, the zero sequence current transformer has a signal output. When the signal output reaches a certain value, it triggers the thyristor to conduct and makes the leakage release act, thus driving the traction bar to disconnect the operating mechanism in a short time and cut off the power supply, thus realizing the leakage protection function. (The schematic diagram of working principle is as follows)



TDK3EL RECLOSER RESIDUAL CURRENT CIRCUIT BREAKER (INTELLIGENT RECLOSING TYPE)

Scope of Application

The rated insulation voltage of recloser residual current circuit breaker (intelligent reclosing type) is 1000V, which is suitable for three-phase four-wire neutral point direct grounding (TT) distribution networks with AC 50Hz, 400V rated voltage and 800A rated current. It is used to provide indirect contact protection; Prevent fire danger caused by grounding fault current due to equipment insulation damage; And it can be used to distribute electric energy and it can also be used to distribute electric energy and protect lines and power supply equipment from overload, undervoltage, short circuit, single-phase grounding and other faults.

The products conform to IEC60947-2 standard.

Model and Meaning

TD	K	3	E	L	-	250	C	Y
①	②	③	④	⑤		⑥	⑦	⑧

Serial No.	Item meaning
①	Enterprise code: TALEMOD
②	MCCB (Molded Case Circuit Breaker)
③	Design No.
④	Electronic & adjustable
⑤	With residual current protection
⑥	Frame grade current (A): Inm=125, Inm=250, Inm=400, Inm=630, Inm=800
⑦	Automatic reclosing of leakage trip
⑧	Y: LCD; S: Digital

Main Functions and Features

- High-performance 32-bit ARM microprocessor is used to carry out signal processing and intelligent control in real time;
- LCD Chinese/English display provides friendly HMI and simple operation;
- For residual current (leakage) protection, the residual current gear can be set online, with reclosing function;
- Monitor and track the residual current of the line in real time, and automatically adjust the gear to ensure the operation rate and reliability of the product;
- Long delay, short delay and instantaneous three-stage protection, electronic tripping mode is applied, which is independent of supply voltage;
- High breaking capacity could ensure the reliability of short circuit protection for the line;
- Overvoltage protection, undervoltage protection, phase loss protection;
- Real-time display of residual current, three-phase supply voltage and load current of the line;
- Protection functions and parameters can be set and modified online;
- Trip types (residual current, locking, overload, undervoltage, overvoltage, phase loss) can be identified & displayed, and can be stored, inquired & deleted;
- Network type has communication function, which can realize remote communication, telemetry, remote control and remote adjustment;
- Pluggable lightning protection module (optional);
- Infrared communication function (optional).

Main Technical Parameters

Model		TDK3EL-125CY TDK3EL-125CS	TDK3EL-250CY TDK3EL-250CS	TDK3EL-400CY TDK3EL-400CS	TDK3EL-630CY TDK3EL-630CS	TDK3EL-800CY TDK3EL-800CS
Frame grade current Inm(A)		125	250	400	630	800
No. of poles		3P+N	3P+N, 2P	3P+N	3P+N	3P+N
Rated operating voltage Ue(V)		AC400/50Hz				
Rated insulation voltage Ui(V)		1000				
Rated impulse withstand voltage Uimp(kV)		8				
Flashover distance (mm)		≯50		≯100		
Ultimate short-circuit breaking capacity Icu(kA)		50 70(H)		65 85(H)	65	
Operating short-circuit breaking capacity Ics(kA)		35 50(H)		42 65(H)	42	
Rated residual short-circuit making (breaking) capacity I△m (kA)		12.5 17.5(H)		16.25 21.5(H)	16.25	
Rated short-time withstand current Icw (kA)/s		1.5	3	5	8	10
Residual current operating characteristics		AC type				
Rated residual operating current I△n (mA)		50/100/200/300/400/500/600/800 MCU automatic tracking or manual setting			100/200/300/400/500/600/800/ 1000 MCU automatic tracking or manual setting	
Residual operating time characteristics		Delayed/non-delayed type				
Limit non-drive time of delayed type (s)		0.06/0.1/0.2 Optional: 2I△n				
Breaking time (s)		I△n≤0.5; 2I△n≤0.2; 5I△n≤0.15				
Auto reclosing time (s)		20 ~ 60				
Operational performance (times)	Powered	1500	1000	1000		500
	Not powered	8500	7000	4000		2500
	Total	10000	8000	5000		3000
Overload and short circuit characteristics		Three-stage protection, electronically adjustable, see "Description of Protection characteristics" for details				
Overvoltage protection value (V)		Set value (250 ~ 300) ± 5%				
Undervoltage protection value (V)		Set value (145 ~ 200) ± 5%				
Link control delay time (ms)		≤40ms				
Communication delay time (ms)		≤200ms				

TDK5EL RECLOSER RESIDUAL CURRENT CIRCUIT BREAKER (INTELLIGENT RECLOSING TYPE)

Scope of Application

The rated insulation voltage of recloser residual current circuit breaker (intelligent reclosing type) is 1000V, which is suitable for three-phase four-wire neutral point direct grounding (TT) distribution networks with AC 50Hz, 400V rated voltage and 630A rated current. It is used to provide indirect contact protection; Prevent fire danger caused by grounding fault current due to equipment insulation damage; And it can be used to distribute electric energy and it can also be used to distribute electric energy and protect lines and power supply equipment from overload, undervoltage, short circuit, single-phase grounding and other faults.

The products conform to IEC60947-2 standard.

Model and Meaning

TD	K	5	E	L	-	250	C	Y
①	②	③	④	⑤		⑥	⑦	⑧

Serial No.	Item meaning
①	Enterprise code: TALEMOD
②	MCCB (Molded Case Circuit Breaker)
③	Design No.
④	Electronic & adjustable
⑤	With residual current protection
⑥	Frame grade current (A): Inm=125, Inm=250, Inm=400, Inm=630
⑦	Automatic reclosing of leakage trip
⑧	Y: LCD; S: Digital

Main Functions and Features

- High-performance 32-bit ARM microprocessor is used to carry out signal processing and intelligent control in real time;
- LCD Chinese/English display provides friendly HMI and simple operation;
- For residual current (leakage) protection, the residual current gear can be set online, with reclosing function;
- Monitor and track the residual current of the line in real time, and automatically adjust the gear to ensure the operation rate and reliability of the product;
- Long delay, short delay and instantaneous three-stage protection, electronic tripping mode is applied, which is independent of supply voltage;
- High breaking capacity could ensure the reliability of short circuit protection for the line;
- Overvoltage protection, undervoltage protection, phase loss protection;
- Real-time display of residual current, three-phase supply voltage and load current of the line;
- Protection functions and parameters can be set and modified online;
- Trip types (residual current, locking, overload, undervoltage, overvoltage, phase loss) can be identified & displayed, and can be stored, inquired & deleted;
- Network type has communication function, which can realize remote communication, telemetry, remote control and remote adjustment;
- Pluggable lightning protection module (optional);
- Infrared communication function (optional).

Main Technical Parameters

Model		TDK5EL-125CY TDK5EL-125CS	TDK5EL-250CY TDK5EL-250CS	TDK5EL-400CY TDK5EL-400CS	TDK5EL-630CY TDK5EL-630CS
Frame grade current Inm(A)		125	250	400	630
No. of poles		3P+N	3P+N	3P+N	3P+N
Rated operating voltage Ue(V)		AC400/50Hz			
Rated insulation voltage Ui(V)		800		1000	
Rated impulse withstand voltage Uimp(kV)		8			
Flashover distance (mm)		≯50		≯100	
Ultimate short-circuit breaking capacity Icu(kA)		50		65	85
Operating short-circuit breaking capacity Ics(kA)		35		42	65
Rated residual short-circuit making (breaking) capacity I△m (kA)		12.5		16.25	21.25
Rated short-time withstand current Icw (kA)/s		1.5	3	5	8
Residual current operating characteristics		AC type			
Rated residual operating current I△n (mA)		50/100/200/300/400/500/600/800 MCU automatic tracking or manual setting		100/200/300/400/500/600/800/ 1000 MCU automatic tracking or manual setting	
Residual operating time characteristics		Delayed/non-delayed type			
Limit non-drive time of delayed type (s)		0.06: 2I△n			
Breaking time (s)		I△n≤0.5; 2I△n≤0.2; 5I△n≤0.15			
Auto reclosing time (s)		20 ~ 60			
Operational performance (times)	Powered	1500	1000	1000	
	Not powered	8500	7000	4000	
	Total	10000	8000	5000	
Overload and short circuit characteristics		Three-stage protection, electronically adjustable, see "Description of Protection characteristics" for details			
Overvoltage protection value (V)		Set value (250 ~ 300) ± 5%			
Undervoltage protection value (V)		Set value (145 ~ 200) ± 5%			
Link control delay time (ms)		≤40ms			
Communication delay time (ms)		≤200ms			

TDK3ELJ RECLOSER RESIDUAL CURRENT CIRCUIT BREAKER (METERING TYPE)

Model and Meaning

TD	K	3	E	L	J	-	250	C	Y	Z	T
①	②	③	④	⑤	⑥		⑦	⑧	⑨	⑩	⑪

Serial No.	Item meaning
①	Enterprise code: TALEMOD
②	MCCB (Molded Case Circuit Breaker)
③	Design No.
④	Electronic & adjustable
⑤	With residual current protection
⑥	J: Metering type
⑦	Frame grade current (A): Inm=125, Inm=250, Inm=400, Inm=630, Inm=800 (Note: Model 800 does not have neutral wire on left)
⑧	Automatic reclosing of leakage trip
⑨	Y: LCD
⑩	Z: Neutral wire on left; N/A: Neutral wire on right
⑪	Standard type

Main Functions and Features

- High-performance 32-bit ARM microprocessor is used to carry out signal processing and intelligent control in real time;
- LCD Chinese/English display provides friendly HMI and simple operation;
- For residual current (leakage) protection, the residual current gear can be set online, with reclosing function;
- Monitor and track the residual current of the line in real time, and automatically adjust the gear to ensure the operation rate and reliability of the product;
- Long delay, short delay and instantaneous three-stage protection, electronic tripping mode is applied, which is independent of supply voltage;
- High breaking capacity could ensure the reliability of short circuit protection for the line;
- Overvoltage protection, undervoltage protection, phase loss protection and neutral wire missing protection; Protection functions and parameters can be set and modified online;
- Real-time display of line residual current, three-phase supply voltage and load current; Real-time measurement of parameters such as active power, reactive power, apparent power & power factor;
- Trip types (residual current, locking, overload, undervoltage, overvoltage, phase loss, fault neutral line) can be identified & displayed, and can be stored, inquired & deleted;
- Functions of remote communication, telemetry, remote control and remote adjustment are supported;
- HPLC pluggable module and micro-power Bluetooth wireless communication;
- 0.05In-1.2In metering can reach level 1.0; Real-time monitoring of the temperature of the incoming connector bar (optional);
- Accumulation of three-phase active power; Modes such as time control & cost control are optional, and the application is more flexible;
- Support DL/T645 protocol and Modbus protocol, and automatic identification is achieved; Support online remote upgrade, which is convenient for maintenance and upgrade;
- Accuracy grade: The highest accuracy of current and voltage can reach 0.5s; The accuracy of active and reactive power can reach level 1, and the residual current can reach level 2.

Main Technical Parameters

Model		TDK3ELJ-125	TDK3ELJ-250	TDK3ELJ-400 TDK3ELJ-630	TDK3ELJ-630	TDK3ELJ-800
Frame grade current Inm(A)		125	250	400, 630	630	800
No. of poles		3P+N				
Rated operating voltage Ue(V)		AC400/50Hz				
Rated insulation voltage Ui(V)		1000				
Rated impulse withstand voltage Uimp(kV)		8				
Flashover distance (mm)		≯50		≯100		
Ultimate short-circuit breaking capacity Icu(kA)		50 70(H)		65 85(H)	65 85(H)	65 85(H)
Operating short-circuit breaking capacity Ics(kA)		35 50(H)		42 55(H)	50 65(H)	42 55(H)
Rated residual short-circuit making (breaking) capacity I△m (kA)		12.5 17.5(H)		16.25 21.25(H)		
Rated short-time withstand current Icw (kA)/s		3		400: 5 630: 8	8	10
Residual current operating characteristics		AC type				
Rated residual operating current I△n (mA)		30/50/75/100/200/300/500/600/800/Auto		30/50/100/200/300/400/500/600/800/1000/Auto		
Residual operating time characteristics		Delayed/non-delayed type				
Limit non-drive time of delayed type (s)		0.06/0.1/0.2 Optional: 2I△n				
Breaking time (s)		I△n≤0.5; 2I△n≤0.2; 5I△n≤0.15				
Auto re-closing time (s)		20 ~ 60				
Operational performance (times)	Powered	1000		1000		500
	Not powered	7000		4000		2500
	Total	8000		5000		3000
Overload and short circuit characteristics		Three-stage protection, electronically adjustable, see "Description of Protection characteristics" for details				
Overvoltage protection value (V)		Set value (231 ~ 330)/default value 275V				
Undervoltage protection value (V)		Set value (88 ~ 209)/default value 145V				
Phase loss protection value (V)		Set value (10 ~ 130)/default value 30V				
Link control delay time (ms)		≤40ms				
Communication delay time (ms)		≤200ms				

Measuring Accuracy Grade

Accuracy	Allowable error
Current accuracy	± 0.5%, ± 1.0%
Voltage accuracy	± 0.5%, ± 1.0%
Active power accuracy	± 1.0%, ± 1.5%, 2.0%, 2.5%
Reactive power accuracy	± 1.0%, ± 1.5%, 2.0%, 2.5%
Residual current accuracy	± 1.0%, ± 2.0%

TDK3ELG RECLOSER RESIDUAL CURRENT CIRCUIT BREAKER (PHOTOVOLTAIC TYPE)

Model and Meaning

TD	K	3	E	L	G	-	125	C	Y	/	□	/	□	/	□
①	②	③	④	⑤	⑥		⑦	⑧	⑨		⑩		⑪		⑫

Serial No.	Item meaning
①	Enterprise code: TALEMOD
②	MCCB (Molded Case Circuit Breaker)
③	Design No.
④	Electronic
⑤	With residual current protection
⑥	G: Photovoltaic type
⑦	Frame grade current (A): Inm=125, Inm=250, Inm=400, Inm=630, Inm=800
⑧	Automatic reclosing
⑨	Y: LCD; B: Bluetooth
⑩	Accessory code
⑪	ZB: Carrier module
⑫	W: Temperature detection

Main Functions and Features

- High-performance 32-bit ARM microprocessor is used to carry out signal processing and intelligent control in real time;
- LCD Chinese/English display provides friendly HMI and simple operation;
- For residual current (leakage) protection, the residual current gear can be set online, with reclosing function;
- Monitor and track the residual current of the line in real time, and automatically adjust the gear to ensure the operation rate and reliability of the product;
- Long delay, short delay and instantaneous three-stage protection, electronic tripping mode is applied, which is independent of supply voltage;
- High breaking capacity could ensure the reliability of short circuit protection for the line;
- Overvoltage protection, undervoltage protection, phase loss protection and neutral wire missing protection;
- Real-time display of residual current, three-phase supply voltage and load current of the line;
- Protection functions and parameters can be set and modified online;
- Trip types (residual current, locking, overload, undervoltage, overvoltage, voltage loss, phase loss, fault neutral line) can be identified & displayed, and can be stored, inquired & deleted;
- Functions of remote communication, telemetry, remote control and remote adjustment are supported;
- HPLC pluggable module and micro-power Bluetooth wireless communication;
- 0.05In-1.2In measurement can reach level 1.0;
- Real-time measurement of parameters such as active power, reactive power, apparent power & power factor;
- Accumulation of three-phase active power;
- Modes such as time control & cost control are optional, and the application is more flexible;
- Support DL/T645 protocol and Modbus protocol, and automatic identification is achieved;
- Real-time monitoring of the temperature of the incoming connector bar (optional);
- Support online remote upgrade, which is convenient for maintenance and upgrade;
- Accuracy grade: The highest accuracy of current and voltage can reach 0.5s; The accuracy of active and reactive power can reach level 1, and the residual current can reach level 2;
- Active power demand overrun, reactive power demand overrun, current mutation event, cut-off, voltage harmonic content, current harmonic content, voltage waveform distortion, current waveform distortion and island protection are supported;
- Passive island protection;
- Overheat protection of terminal and contact;
- Power generation quality monitoring and protection;
- Three-phase unbalance monitoring and protection of power generation current.

Main Technical Parameters

Model		TDK3ELG-125	TDK3ELG-250	TDK3ELG-400 TDK3ELG-630	TDK3ELG-630	TDK3ELG-800
Frame grade current Inm(A)		125	250	400, 630	630	800
No. of poles		3P+N				
Rated operating voltage Ue(V)		AC400/50Hz				
Rated insulation voltage Ui(V)		1000				
Rated impulse withstand voltage Uimp(kV)		8				
Flashover distance (mm)		≯50		≯100		
Ultimate short-circuit breaking capacity Icu(kA)		25 35(H)	50 70(H)	65 85(H)	65 85(H)	65 85(H)
Operating short-circuit breaking capacity Ics(kA)		17.5 22(H)	35 50(H)	42 55(H)	50 65(H)	42 55(H)
Rated residual short-circuit making (breaking) capacity I△m (kA)		6.25 8.75(H)	12.5 17.5(H)	16.25 21.25(H)		
Rated short-time withstand current Icw (kA)/s		3		400: 5 630: 8	8	10
Residual current operating characteristics		AC type				
Rated residual operating current I△n (mA)		30~1000/Auto				
Residual operating time characteristics		Delayed/non-delayed type				
Limit non-drive time of delayed type (s)		0.1~0.5				
Operational performance (times)	Powered	1000		1000		500
	Not powered	7000		4000		2500
	Total	8000		5000		3000
Overload and short circuit characteristics		Three-stage protection, electronically adjustable, see "Description of Protection characteristics" for details				
Overvoltage protection value (V)		Set value (231 ~ 330)/default value 282V				
Undervoltage protection value (V)		Set value (88 ~ 209)/default value 187V				
Phase loss protection value (V)		Set value (10 ~ 130)/default value 30V				

TALEMOD

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