

## Features

- Measurement of time and motion
- Performance tests of coil, motor, and optional tests such as anti-pumping relay, under voltage relay, blocking coil, and …
- Special tests for contactors and non operating mechanism breakers
- Graphical results for quick interpretation
- PC control with BTSOFT software
- Extremely reliable and easy to use

## Applications

- Circuit breaker manufacturers
- Repair and maintenance of electrical power plant companies
- Electrical power plant EPC companies
- Electrical power labs
- Big factories e.g. Steel, petrochemicals, refineries, and...



Specifications are subject to change without notice.         Central         Optication contage without notice.         Type       Potable Circuit Breaker Analyzer         Main Voltage       Difference Analyzer         Dimensions (L.V W K1)       Base Unit 400 x330 x130 mm         Weight       Base Unit 400 x330 x130 mm         Weight       Base Unit 400 x330 x130 mm         Sequences (Colse, Oppn)       C. 0, 0, 0, 0, 0, 0, -10, 0, -10, 0, -10, 0         Contract Inputs       C. 0, 0, 0, 0, 0, -10, 0, -10, 0, -10, 0         Main Voltage And Current       0, 0, 0, 0, 0, -10, 0, -10, 0, -10, 0, 10, 0         Contact Inputs       C. 0, 0, 0, 0, 0, -10, 0, -10, 0, -10, 0, 10, 0         Motor Voltage And Current       0, 0, 0, 0, 0, -10, 0, -10, 0, 10, 0         Contact Inputs       110 metable Circuit Braker Analyzer         Contact Inputs       C. 0, 0, 0, 0, -10, 0, -10, 0, 10, 0         Time Sequences (Colse (Jordan Circuit Circuit Sequences)       Contact Inputs         Contact Inputs       10, 0, 0, 0, 0, 0, 0, 0         Time Sequences (Colse (I	BT12 Specifications Specifications are valid at nominal input voltage and an ambient temperature of +25°C, (77°F).		
Type     Portable Circult Events Analyzer       Main Votage     2207 AC, 50 Hz       Dimensions (L x W x H)     Basic Unit 469: 330 150 mm       Weight     9 kg       CE Marking     EWC 2004/108/EC       Breaker Operation     C, 0, C, C, C, C, C, O, T, C, O       Sequences (C:dose, 0.open)     C, 0, C, C, C, C, C, O, T, C, O       Contact Inputs     0.2500 / ACICC (Set Automatically), 50 Hz, 10A       Motor Votage And Current     0.2500 / ACICC (Set Automatically), 50 Hz, 10A       Contact Inputs     16 Input Channels (3 Main, 13 Auxiliar)       Time Ornates Range     40 s       Time Spring Charge Range     40 s       Resolution     0.1 ms       Inaccuracy     0.01% Of Printed Value 2.0 ms       With Operation Mechanism (Coll Encrycling)     With Operation Mechanism (Coll Encrycling)       Without Operation Mechanism (Coll Encrycling)     Without Operation Mechanism (Coll Encrycling)       Without Operation Mechanism (Coll Encrycling)     Without Operation Mechanism (Coll Encrycling)       Without Operation Mechanism (Coll Encrycling)     Without Operation Mechanism (Coll Encrycling)       Main Contacts Range     0.01%     0.01%       Time Difference Between Control Pulse And Timer Start     < 0.1 ms       Main Contacts Range     0.05%     0.05%       Main Carl Resolution     < 0.1 ms       Basic Inaccurac	Specifications are valid at nominal input voi Specifications are sub	ject to change without notice.	
Main Voltage     220VAC. 50 Hz       Dimensions (Lx Wx H)     Basic Unit 460 x 330 x 150 mm       Weight     9 kg       CE Marking     EMC 2004/108/EC       LVD 2006/95/EC     Excaker Operation       Sequences (Cclose, Oxpen)     C, O, C-O, C-T-O, O-T-C, O-T-C-O       Close / Open1 / Open2 Coll Voltage And Current     0-250V ACDC (Set Automatically), S0 Hz, 10A       Motor Voltage And Current     0-250V ACDC (Set Automatically), S0 Hz, 10A       Time Contacts Range     16 Input Channels (3 Main, 13 Auxiliary)       Time Contacts Range     0 to 99 ms       Time Spring Charge Range     0 to 99 ms       Time Sorie Charge Range     0 to 99 ms       Start Time Measurement     Without Operation Mechanism (Coll Energizing)       Without Operation Mechanism (Charges In The Each Main Contact     < 0.1 ms       Basic Inaccuracy     0.02%       Measurement Resolution     < 0.1 mm       Storag		General	
Dimensions (L XW H)     Basic Unit 400 x302 x150 mm       Weight     9 kg       CE Marking     EMC 2004/108/EC       Breaker Operation     C, O, C, O, C, T, O, O, T, C, O, C, T, O, O, T, C, O, C, T, O, O, T, C, O, C, T, O, O, T, C, O, T, T, M, M, T, M,			
Weight     9.4g       CE Marking     EMC 2004/10/8/EC LVD 2008/95/EC       Breaker Operation     C. O., C-O., C-T-O., O-T-C-O.       Close / Open1 / Open2 Coll Voltage And Current     0-250V ACDD (Set Automatically), S0 Hz, 10A       Motor Voltage And Current     0-250V ACDD (Set Automatically), S0 Hz, 10A       Motor Voltage And Current     0-250V ACDD (Set Automatically), S0 Hz, 10A       Contact Inputs     16 Input Channels (3 Main, 13 Auxiliary)       Time Contacts Range     40 s       Resolution     0.11 ms       Inaccuracy     0.01% Of Printion Mechanism (Changes In The Each Main Contacts       Time Difference Between Control Pulse And Timer Start     < 0.1 ms			
CE Marking     EMC 2004/108/EC       Breaker Operation       Sequences (C.close, O.open)     C, O, C, C, O, C, T, O, O, T, C, O, C, C, D, C, T, O, O, T, C, C, O, T, C,	· · · · · · · · · · · · · · · · · · ·		
Link King     LVD     2006/95/EC       Breaker Operation       Close / Open1 / Open2 Coil Voltage And Current     0-250V AC/DC (Set Automatically), 50 Hz, 10A       Moter Voltage And Current       0-250V AC/DC (Set Automatically), 50 Hz, 10A       Moter Voltage And Current       0-250V AC/DC (Set Automatically), 50 Hz, 10A       Moter Voltage And Current       0-250V AC/DC (Set Automatically), 50 Hz, 10A       Ontact Inputs       Ontact Inputs       Ontact Inputs       Ontact Inputs       Time Spring Charge Range       Ad 9 a       Notice Control Pulse And Timer Start       Notice Resourcent Inter Start       Motion Analyzer       Messurement Interval       999 ms       Sampling Frequency       Advantage Inserver       Advantage Inserver       Operating Transducer Input       Resistive Transducer Input       Operatin			
Sequences (C-lose, Open)       C, 0, C-0, C-T, 0, 0-T, C, 10A         Close / Open1 / Open2 Coll Voltage And Current       0-250V AC/DC (Set Automatically), 50 Hz, 10A         Motor Voltage And Current         Contact Inputs         Other Status         Contact Inputs         Contact Inputs         Other Status         Time Contact Range         Other Status         Time Contact Range         Other Status         Intercontrol Pulse And Timer Statt         Control Pulse And Timer Statt         Motion Analyzer         Measurement Resolution         Bain Inaccuracy         On 5%         Time Difference Between Control Pulse And Timer Statt         Motion Analyzer         Measurement Resolution       < 0.1 mm	<td>CE Marking</td> <td></td>	CE Marking	
Close / Open1 / Open2 Coll Voltage And Current     0-250V AC/DC (Set Automatically), 50 Hz, 10A       Motor Voltage And Current     0-250V AC/DC (Set Automatically), 50 Hz, 10A       Contact Inputs     16 Input Channels (3 Main, 13 Auxiliary)       Time Ontacts Range     0 b 999 ms       Time Spring Charge Range     40 s       Resolution     0.1 ms       Inaccuracy     0.01% Of Printed Value ± 0.1 ms       Start Time Measurement     With Operation Mechanism (Changes in The Each Main Contacts       Time Difference Between Control Pulse And Timer Start     < 0.1 ms	Break	er Operation	
Motor Voltage And Current     D-250V AC/DC (Set Automatically), 50 Hz, 10A       Time Measurement       Contact Inputs     16 Input Channels (3 Main, 13 Auxiliary)       Time Spring Charge Range     0 to 99 ms       Time Spring Charge Range     0.0 s       Resolution     0.1 ms       Inaccuracy     0.01% Of Printed Value ± 0.1 ms       Start Time Measurement     With Operation Mechanism (Charges In The Each Main Contacts       Time Difference Between Control Pulse And Timer Start     < 0.1 mm		C , O , C-O , C-T-O , O-T-C , O-T-C-O	
Time Measurement         Contact Inputs       16 Input Channels (3 Main, 13 Auxiliary)         Time Contacts Range       40 s         Resolution       0.1 ms         Inaccuracy       0.01% Of Printed Value ± 0.1 ms         Start Time Measurement       With Operation Mechanism (Coll Energizing)         Without Operation Mechanism (Coll Energizing)       without Operation Mechanism (Coll Energizing)         Measurement Resolution       < 0.1 ms			
Contact Inputs     16 Input Channels (3 Main, 13 Auxiliary)       Time Contacts Range     0 to 999 ms       Time Spring Charge Range     40 s       Resolution     0.11 ms       Inaccuracy     0.01% Of Printed Value ± 0.1 ms       Start Time Measurement     With Operation Mechanism (Coll Energizing)       Without Operation Mechanism (Coll Energizing)     Without Operation Mechanism (Coll Energizing)       Measurement Resolution     < 0.1 ms			
Time Contacts Range     0 to 999 ms       Time Spring Charge Range     40 s       Resolution     0.1 ms       Inaccuracy     0.01% Of Printed Value ± 0.1 ms       Start Time Measurement     With Operation Mechanism (Coll Energizing)       Without Operation Mechanism (Coll Energizing)     Without Operation Mechanism (Coll Energizing)       Measurement Resolution     < 0.1 ms			
Time Spring Charge Range       40 s         Resolution       0.1 ms         Inaccuracy       0.01% OF Printed Value ± 0.1 ms         Start Time Measurement       With Operation Mechanism (Coll Energizing)         Without Operation Mechanism (Coll Energizing)       Without Operation Mechanism (Coll Energizing)         Time Difference Between Control Pulse And Timer Start       < 0.1 ms			
Resolution     0.1 ms       Inaccuracy     0.01% Of Printed Value ± 0.1 ms       Start Time Measurement     With Operation Mechanism (Changes in The Each Main Contacts       Time Difference Between Control Pulse And Timer Start     < 0.1 ms			
Inaccuracy     0.01% Of Printed Value ± 0.1 ms       Start Time Measurement     With Operation Mechanism (Coll Energizing)       Time Difference Between Control Pulse And Timer Start     < 0.1 ms			
Without Operation Mechanism (Changes In The Each Main Contacts       Time Difference Between Control Pulse And Timer Start     < 0.1 ms       Measurement Resolution     < 0.1 mm       Basic Inaccuracy     0.5%       Time-Base Inaccuracy     0.02%       Measurement Interval     999 ms       Sampling Frequency     100 At 10 kD       Digital Travel Transducer Input     Resistive Transducer / 100 At 010 kΩ       Digital Travel Transducer Input     Environment       Operating Temperature     -20 to 55 °C (-4 to 131 °F)       Storage Temperature     -30 to 70 °C (-22 to 158 °F)       Humidity     20% – 95% RH , Non-Condensing       Miscellaneous       Storage Capacity For Over 98 Test Records       Internal Thermal Printer       USB and RS-232 Interface       PC Software       Accessories       Motor Test Lead Set (4 x 4m)       Voor Test Lead Set (3 x 8m with Clamps)       Main Contacts Test Lead Set (3 x 8m with Clamps)       Good Option       Main Contacts Test Lead Set (3 x 8m with Clamps)			
Without Operation Mechanism (Changes in The Each Main Contacts         Time Difference Between Control Pulse And Timer Start         < 0.1 ms	The second se	With Operation Mechanism (Coil Energizing)	
Motion Analyzer         Measurement Resolution       < 0.1 mm		Without Operation Mechanism (Changes In The Each Main Contacts	
Measurement Resolution     < 0.1 mm			
Basic Inaccuracy     0.5%       Time-Base Inaccuracy     0.02%       Measurement Interval     999 ms       Sampling Frequency     10 kHz       Analog Travel Transducer Input     Resistive Transducer / 100 Ω to 10 kΩ       Digital Travel Transducer Input     Resistive Transducer / 2500 Puls/r <b>Environment</b> Operating Temperature     -20 to 55 °C (-4 to 131 °F)       Storage Temperature     -30 to 70 °C (-22 to 158 °F)       Humidity     20% – 95% RH , Non-Condensing <b>Miscellaneous</b> Storage Capacity For Over 96 Test Records       Internal Thermal Printer     USB and RS-232 Interface       PC Software     Accessories       Motor Test Lead Set (4 x 4m)       Coil Test Lead Set (5 x 4m)       Image Test Lead Set (3 x 8m with Clamps)     Earthing Cable (4m with Clamp)	Motic	on Analyzer	
Time-Base Inaccuracy       0.02%         Measurement Interval       999 ms         Samping Frequency       10 kHz         Analog Travel Transducer Input       Resistive Transducer / 100 Ω to 10 kΩ         Digital Travel Transducer Input       Rotary Encoder / 2500 Puls/r         Environment         Operating Temperature       -20 to 55 °C (-4 to 131 °F)         Storage Temperature       -30 to 70 °C (-22 to 158 °F)         Humidity       20% – 95% RH , Non-Condensing         Miscellaneous         Storage Capacity For Over 96 Test Records         Internal Thermal Printer       USB and R2-32 Interface         PC Software       Accessories         Motor Test Lead Set (4 x 4m)       Coil Test Lead Set (5 x 4m)         Image Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)         Image Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)			
Measurement Interval     999 ms       Sampling Frequency     10 kHz       Analog Travel Transducer Input     Resistive Transducer / 100 Ω to 10 kΩ       Digital Travel Transducer Input     Rotary Encoder / 2500 Puls/r       Environment       Operating Temperature     -20 to 55 °C (-4 to 131 °F)       Storage Temperature     -30 to 70 °C (-22 to 158 °F)       Humidity     20% – 95% RH, Non-Condensing       Miscellaneous       Storage Capacity For Over 96 Test Records       Internal Thermal Printer     USB and RS-232 Interface       Coil Test Lead Set (4 x 4m)       Coil Test Lead Set (4 x 4m)       Coil Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)       Main Contacts Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)			
Sampling Frequency     10 kHz       Analog Travel Transducer Input     Resistive Transducer / 100 Ω to 10 kΩ       Digital Travel Transducer Input     Rotary Encoder / 2500 Puls/r       Environment       Operating Temperature     -20 to 55 °C (-4 to 131 °F)       Storage Temperature     -30 to 70 °C (-22 to 158 °F)       Humidity     20% – 95% RH , Non-Condensing       Miscellaneous       Storage Capacity For Over 96 Test Records       Internal Thermal Printer       USB and RS-322 Interface       PC Software       Accessories       Motor Test Lead Set (4 x 4m)       Operating Capacity For Over 96 Test Lead Set (5 x 4m)       Operating Temperature       Operating Thermal Printer       USB and RS-322 Interface       PC Software       Accessories       Motor Test Lead Set (4 x 4m)       Operating Cable (4m with Clamps)       Main Contacts Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)			
Analog Travel Transducer Input       Resistive Transducer / 100 Ω to 10 kΩ         Digital Travel Transducer Input       Rotary Encoder / 2500 Puls/r         Environment         Operating Temperature       -20 to 55 °C (-4 to 131 °F)         Storage Temperature       -30 to 70 °C (-22 to 158 °F)         Humidity       20% – 95% RH, Non-Condensing         Miscellaneous       Internal Thermal Printer         USB and RS-232 Interface       PC Software         Accessories       Coil Test Lead Set (4 x 4m)         VO       VO       VO         Main Contacts Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)         VO       VO       VO         VO       VO       VO         VO       VO       VO			
Environment         Operating Temperature       -20 to 55 °C (-4 to 131 °F)         Storage Temperature       -30 to 70 °C (-22 to 158 °F)         Humidity       20% – 95% RH , Non-Condensing         Miscellaneous         Storage Capacity For Over 96 Test Records         Internal Printer         USB and RS-232 Internate         Coil Test Lead Set (4 x 4m)         Coil Test Lead Set (5 x 4m)         Operating Cable (4 x 4m)         Coil Test Lead Set (5 x 4m)         Operation Coil Test Lead Set (5 x 4m)         Motor Test Lead Set (3 x 8m with Clamps)         Main Contacts Test Lead Set (3 x 8m with Clamps)         Coil Test Lead Set (3 x 8m with Clamps)         Earthing Cable (4m with Clamp)		Resistive Transducer / 100 Ω to 10 kΩ	
Operating Temperature       -20 to 55 °C (4 to 131 °F)         Storage Temperature       -30 to 70 °C (-22 to 158 °F)         Humidity       20% – 95% RH, Non-Condensing         Miscellaneous         Storage Capacity For Over 96 Test Records         Internal Thermal Printer         USB and RS-232 Interface         PC Software       PC Software         Motor Test Lead Set (4 x 4m)         Voor Test Lead Set (4 x 4m)       Coil Test Lead Set (5 x 4m)         Voor Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)         Main Contacts Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)			
Storage Temperature     -30 to 70 °C (-22 to 158 °F)       Humidity     20% – 95% RH , Non-Condensing       Miscellaneous       Storage Capacity For Over 96 Test Records       Internal Thermal Printer     USB and RS-232 Interface       PC Software     Accessories       Motor Test Lead Set (4 x 4m)     Coil Test Lead Set (5 x 4m)       Image: Contracts Test Lead Set (3 x 8m with Clamps)     Earthing Cable (4m with Clamp)		vironment	
Humidity     20% – 95% RH , Non-Condensing       Miscellaneous       Storage Capacity For Over 96 Test Records       Internal Thermal Printer       USB and RS-232 Interface       PC Software       Motor Test Lead Set (4 x 4m)       Coil Test Lead Set (5 x 4m)       Of Option       Main Contacts Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)       Of Option		-20 to 55 °C (-4 to 131 °F)	
Miscellaneous         Storage Capacity For Over 96 Test Records         Internal Thermal Printer         USB and RS-232 Interface         PC Software         Accessories         Motor Test Lead Set (4 x 4m)         Coil Test Lead Set (5 x 4m)         Image: Coil Test Lead Set (4 x 4m)       Image: Coil Test Lead Set (5 x 4m)         Image: Coil Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)         Image: Coil Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)         Image: Coil Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)			
Storage Capacity For Over 96 Test Records         Internal Thermal Printer         USB and RS-232 Interface         PC Software         Accessories         Motor Test Lead Set (4 x 4m)       Coil Test Lead Set (5 x 4m)         VOO       VOO </td <td></td> <td></td>			
Internal Thermal Printer         USB and RS-232 Interface         PC Software         Accessories         Motor Test Lead Set (4 x 4m)       Coil Test Lead Set (5 x 4m)         Image: Coll Test Lead Set (5 x 4m)       Image: Coll Test Lead Set (5 x 4m)         Image: Coll Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)         Image: Coll Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)         Image: Coll Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)			
USB and RS-232 Interface         PC Software         Accessories         Motor Test Lead Set (4 x 4m)       Coil Test Lead Set (5 x 4m)         VOD       VOD       VOD         Main Contacts Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)         VOD       VOD       VOD         VI       VI       VI         VI       VI       VIIII VIIII VIIII VIIII VIIIII VIIII VIIII VIIIII VIIII VIIIII VIIII VIIII VIIII VIIII VIIIII VIIII VIIII VIIII VIIIII VIIII VIIIII VIIII VIIIII VIIII VIIII VIIIII VIIII VIIIII VIIII VIIII VIIII VIIII VIIII VIIII VIIII VIIII VIIIII VIIII VIIII VIIIII VIIII VIIII VIIII VIIII VIIII VIIII VIIII VIIII VIIII VIIIII VIIII VIIII VIIII VIIIII VIIII VIIII VIIII			
Accessories         Motor Test Lead Set (4 x 4m)       Coil Test Lead Set (5 x 4m)         Voltation       Voltation         Main Contacts Test Lead Set (3 x 8m with Clamps)       Earthing Cable (4m with Clamp)         Voltation       Voltation			
Motor Test Lead Set (4 x 4m)Coil Test Lead Set (5 x 4m)Coil Test Lead Set (5 x 4m)Coil Test Lead Set (5 x 4m)Main Contacts Test Lead Set (3 x 8m with Clamps)Earthing Cable (4m with Clamp)Coil Test Lead Set (3 x 8m with Clamps)Earthing Cable (4m with Clamp)			
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どうううううううううMain Contacts Test Lead Set (3 x 8m with Clamps)Earthing Cable (4m with Clamp)どうううううどううううどうううううビンチどううううビンチビンチビンチ	Motor Test Lead Set (4 x 4m)	Coil Test Lead Set (5 x 4m)	
Image: Weight of the second	Main Contacts Test Lead Set (3 x 8m with Clamps)	Earthing Cable (4m with Clamp)	
Image: Weight of the second			
Image: Construction       Image: Construction         Power, USB& RS232 Cables       Case Cover & Cable Bag         Image: Construction       Image: Construction         Image: Construction       Image: Construction       Image: Construction         Image: Construction       Image: Construction       Image: Construction       Image: Construction         Image: Construction       Image: Construction       Image: Construction       Image: Construction       Image: Construction         Image: Construction       Image: Construction       Image: Construction       Image: Construction       Image: Construction       Image: Construction         Image: Construction       Image: Construction<		a martin	
Power, USB& RS232 Cables Case Cover & Cable Bag			
Power, USB& RS232 Cables Case Cover & Cable Bag			
Power, USB& RS232 Cables Case Cover & Cable Bag			
	Power, USB& RS232 Cables	Case Cover & Cable Bag	
	a a size		

## **One Year Warranty, Ten Years After Sales Services**

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