LVD Technical Construction File

For

Wenzhou Jinxu Electric Co.,Ltd.

MCB

Model: JX30-32

Prepared For : **Wenzhou Jinxu Electric Co.,Ltd.**
NO.98 Zhangzhai Road,Zhangqu Village,Liushi Town,Yueqing City,Zhejiang Province,China

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Report Number: **MCBTCF0407-LVD**

Date of Test: **Apr.12, 2023**

Date of Report: **Apr.12, 2023**

MCBTCF0407-LVD

TEST REPORT DECLARATION

Applicant	:	Wenzhou Jinxu Electric Co.,Ltd.
Address	:	NO.98 Zhangzhai Road,Zhangqu Village,Liushi Town,Yueqing City,Zhejiang Province,China
Manufacturer	:	Wenzhou Jinxu Electric Co.,Ltd.
Address	:	NO.98 Zhangzhai Road,Zhangqu Village,Liushi Town,Yueqing City,Zhejiang Province,China
EUT Description	:	MCB
Model No.	:	JX30-32
Parameter	:	1P+N 6A~32A 240V;230V Ics=Icn=4500A

Test Procedure Used:
EN 60898-1:2019

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The test results of this report relate only to the tested sample identified in this report.

Date of Test : Apr.12, 2023

Prepared by : (Jack)

Checked by : (Gina)

Approved by : (Johnson)

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Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
4	Classification		P
4.1	According to the number of poles		P
	Single-pole circuit-breakers		N
	Two -pole circuit-breakers with one protected pole		N
	Two -pole circuit-breakers with two protected pole		N
	three -pole circuit-breakers with three protected pole		N
	four -pole circuit-breakers with three protected pole		P
	four -pole circuit-breakers with four protected pole		P
4.2	According to the protection against external influences		P
	Enclosed		P
	Unenclosed		N
4.3	According to the method of mounting		P
	Surface		P
	Flush		N
	Panel board		N
4.4	According to the method of connection		P
	Circuit-breakers the electrical connections of which are not associated with mounting		P
	Circuit-breakers the electrical connections of which are associated with mounting		N
4.5	According to the instantaneous tripping current		P
4.6	According to the I2t characteristic		P
5	Characteristics of circuit-breakers		P
5.1	List of characteristics		P
5.2	Rated quantities		P
5.2.1.	Rated voltages		P
5.2.1.1	Rated operational voltage		P
5.2.1.2	Rated insulation voltage		P
5.2.1.3	Rated impulse withstand voltage		P
5.2.2	Rated current		P
5.2.3	Rated frequency		P
5.2.4	Rated short circuit capacity(Icn)		P
5.2.5	Rated marking and breaking capacity of an individual pole		P
5.3	Standard and preferred values		P
5.3.1	Preferred value of rated voltage		P
5.3.2	Preferred values of rated current		P
5.3.3	Standard values of rated frequency		P
5.3.4	Standard value of rated short-circuit		P
5.3.4.1	Standard value up to and including 10000A		P
5.3.4.2	Standard value above 10000A up to and including		N

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Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
	25000A		
5.3.5	Standard ranges of instantaneous tripping		P
5.3.6	Standard values of rated impulse withstand voltage		P
6	Marking and other product information	P	
6.1	Standard marking		P
	Manufacturer's name or trade mark		P
	Type designation, catalogue number or serial number		P
	Rated voltage		P
	Rated current without symbol "A",		P
	Rated frequency if the circuit-breaker is designed only for one frequency		P
	Rated short-circuit capacity ,in A, within a rectangle, without symbol "A"		P
	Wiring diagram		N
	Reference calibration temperature		P
	Degree of protection	IP20	P
	Energy limiting class in a square in accordance with annex ZA,		P
	Marking and breaking capacity on an individual protected pole of multipole circuit breakers		P
6.2	Additional marking		P
7	Standard conditions for operation in service		P
7.1	Ambient air temperature range		P
	The ambient air temperature does not exceed 40 ℃ and its average over a period of 24h does not exceed 35℃		P
	The lower limit of the ambient air temperature is -5℃		P
7.2	Altitude	<2000m	P
7.3	Atmospheric conditions		P
7.4	Conditions of installation		P
7.5	Pollution degree		P
8	Requirements for construction and operation		P
8.1	Mechanical design		P
8.1.1	General		P
8.1.2	Mechanism		P
	The moving contacts of all poles of multipole circuit-breaker shall be so mechanically coupled tha at all pole, except the switched neutral,		P
	The switched neutral pole of four-pole circuit-breaker shall be not close after and shall not open before the protected poles		P
	It shall be possible to switch the circuit-breaker on and off by hand, for plug-in type circuit-breakers without operating handle, this requirement is not considered met by the fact that		P

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Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
	the circuit-breaker can be removed from its base		
	Circuit-breaker shall be so constructed that the moving contacts can come to rest only in the closed position or in the open position		P
	Circuit-breaker shall provide in the open position an isolation distance in accordance with the requirements necessary to satisfy the isolation function		P
	If a separate mechanical indicator is used to indicate the position of the main contacts, this shall show the colour red for the closed position and the colour green for the open position		N
	Circuit-breakers shall be designed so that the actuator , front plate or cover can only be correctiy fitted in a manner which ensures correct indication of th contact position		P
	The action of the mechanism shall not be infiuenced by the position of enclosures or covers and shall be independent of any removable part		P
	A cover sealed in position by the manufacturer is considered to be a non-removable part		P
8.1.3	Clearances and creepage distance		P
8.1.4	Screws, current-carrying parts and connections		P
8.1.4.1	Connections shall be withstand the mechanical stresses occurring in normal use		P
8.1.4.2	For screws in engagement with a thread of insulating material and which are operated when mounting the circuit-breaker during installation,correct introduction of the screw into the screw hole or nut shall be ensured		N
8.1.4.3	Electrical connections shall be so designed that contact pressure in not trasmitted through insulating material other than ceramic,pure mica or other materal with characteristics no less suitable ,unless there is sufficient resilience in the metallic parts to compersate for any possible shrinkage or yielding of the insulating material		P
8.1.4.4	Current-carrying parts and connections including parts intended for protective conductor,	copper	P
8.1.5	Terminal for external conductors		P
8.1.5.1	Terminal for external conductors shall be such that conductors may be connected so as to ensure that the necessary contact pressure in maintained permanently		P
	Connection arrangements intended for busbar connection are admissible, provided they are not used for the connection of cables		P
8.1.5.2	Circuit-breakers shall be provided with terminals which shall allow the connection of copper		P

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Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
	conductors having normal cross-sectional are show in table5		
8.1.5.3	The means for clamping the conductors in the terminals shall not serve to fix any other component, although they may hold the terminals in place or prevent them from turning.		P
8.1.5.4	Terminals for rated currents up to and including 32 A shall allow the conductors to be connected without special preparation.		P
8.1.5.5	Terminals shall have adequate mechanical strength. Screws and nuts for clamping the conductors shall have a metric ISO thread or a thread comparable in pitch and mechanical strength.		P
8.1.5.6	Terminals shall be so designed that they clamp the conductor without undue damage to the conductor.		P
8.1.5.7	Terminals shall be so designed that they clamp the conductor reliably and between metal surfaces.		P
8.1.5.8	Terminals shall be so designed or positioned that neither a rigid solid conductor nor a wire of a stranded conductor can slip out while the clamping screws or nuts are tightened.		P
8.1.5.9	Terminals shall be so fixed or located that, when the clamping screws or nuts are tightened or loosened, the terminals shall not work loose from their fixings to circuit-breakers.		P
8.1.5.10	Clamping screws or nuts of terminals intended for the connection of protective conductors shall be adequately secured against accidental loosening.		P
8.1.5.11	void		P
8.1.5.12	Screws and nuts of terminals intended for the connection of external conductors shall be in engagement with a metal thread and the screws shall not be of the tapping screw type.		P
8.1.6	Non-interchangeability		P
	For circuit-breakers intended to be mounted on bases forming a unit therewith (plug-in type or screw-in type) it shall not be possible, without the aid of a tool, to replace a circuit-breaker when mounted and wired as for normal use by another of the same make having a higher rated current.		P
8.1.7	Mechanical mounting of plug-in type circuit-breakers		N
	The mechanical mounting of plug-in type circuit-breakers, the holding in position of which does not depend solely on their plug-in		N

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Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
	connection(s), shall be reliable and have adequate stability.		
8.1.7.1	Plug-in type circuit-breakers, the holding in position of which does not depend solely on their plug-in connection(s)		N
8.1.7.2	Plug-in type circuit-breakers, the holding in position of which depends solely on their plug-in connection(s)		N
8.2	Protection against electric shock		P
	Circuit-breakers shall be so designed that, when they are mounted and wired as for normal use (see note to 8.1.6), live parts are not accessible.		P
	For circuit-breakers other than those of the plug-in type, external parts, other than screws or other means for fixing covers and labels, which are accessible when the circuit-breakers are mounted and wired as for normal use, shall either be of insulating material or be lined throughout with insulating material, unless the live parts are within an internal enclosure of insulating material.		P
	Linings shall be fixed in such a way that they are not likely to be lost during installation of the circuit-breakers. They shall have adequate thickness and mechanical strength and shall provide adequate protection at places where sharp edges occur.		P
	Inlet openings for cables or conduits shall either be of insulating material or be provided with bushings or similar devices of insulating material. Such devices shall be reliably fixed and shall have adequate mechanical strength.		P
	For plug-in circuit-breakers, external parts other than screws or other means for fixing covers, which are accessible in normal conditions of use, shall be of insulating material.		N
	Metallic operating means shall be insulated from live parts and their exposed conductive parts shall be covered by insulating material. This requirement does not apply to means for coupling insulated operating means of several poles. Metal parts of the mechanism shall not be accessible. In addition, they shall be insulated from accessible metal parts, from metal frames supporting the base of flush-type circuit-breakers, from screws or other means for fixing the base to its support and from a metal plate, if any, used as support.		P
	It shall be possible to replace plug-in circuit-breakers easily without touching live parts.		N

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Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
	Lacquer or enamel are not considered to provide adequate insulation for the purpose of this subclause.		P
8.3	Dielectric properties and isolating capability		P
8.3.1	Dielectric strength at power frequency		P
8.3.2	Isolating capability		P
8.3.3	Dielectric strength at rated impulse withstand voltage (Uimp)		P
8.4	Temperature-rise		P
8.4.1	Temperature-rise limits		P
	The temperature rises of the parts of a circuit-breaker specified in table 6, measured under the conditions specified in 9.8.2, shall not exceed the limiting values stated in that table.		P
8.4.2	Ambient air temperature		P
8.5	Uninterrupted duty		P
8.6	Automatic operation		N
8.6.1	Standard time-current zone		N
	The tripping characteristic of circuit-breakers shall be such that they ensure adequate protection of the circuit, without premature operation.		N
8.6.2	Conventional quantities		N
8.6.2.1	Conventional time		N
8.6.2.2	Conventional non-tripping current (Int)		N
8.6.2.3	Conventional tripping current (It)		N
8.6.3	Tripping characteristic		N
	The tripping characteristic of circuit-breakers shall be contained within the zone defined in 8.6.1.		N
8.6.3.1	Effect of single-pole loading of multipole circuit-breakers on the tripping characteristic		N
	When circuit-breakers having more than one protected pole are loaded on only one of the protected poles, starting from cold, with a current equal to – 1,1 times the conventional tripping current, for two-pole circuit-breakers with two protected poles, – 1,2 times the conventional tripping current, for three-pole and four-pole circuit-breakers,		P
8.6.3.2	Effect of the ambient air temperature on the tripping characteristic		N
8.7	Mechanical and electrical endurance		P
	Circuit-breakers shall be capable of performing an adequate number of cycles with rated current.		P
8.8	Performance at short-circuit currents		P
	Circuit-breakers shall be capable of performing a		P

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Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
	specified number of short-circuit operations, during which they shall neither endanger the operator nor initiate a flashover between live conductive parts or between live conductive parts and earth.		
8.9	Resistance to mechanical shock and impact		P
	Circuit-breakers shall have adequate mechanical behaviour so as to withstand the stresses imposed during installation and use.		P
8.10	Resistance to heat		P
8.11	Resistance to abnormal heat and to fire		P
8.12	Resistance to rusting		P
8.13	Power loss		P
8.14	Electromagnetic immunity		P
8.15	Electromagnetic emission		P
9	Tests		P
9.1	Type tests and test sequences		P
9.2	Test conditions		P
9.3	Test of indelibility of marking		P
	The test is made by rubbing the marking by hand for 15 s with a piece of cotton soaked with water and again for 15 s with a piece of cotton soaked with aliphatic solvent hexane	After the test, the marking still legible	P
9.4	Test of reliability of screws, current-carrying parts and connections	Φ=4.7mm,1.8Nm	P
9.5	Test of reliability of terminals for external conductors		P
9.5.1	The terminals are fitted with copper conductors of the smallest and largest crosssectional areas specified in table 5, solid or stranded, whichever is the most unfavourable		P
	During the test, the conductor shall not move noticeably in the terminal		P
9.5.2	The terminals are fitted with copper conductors of the smallest and largest crosssectional areas specified in table 5, solid or stranded, whichever is the most unfavourable, and the terminal screws are tightened with a torque equal to two-thirds of that shown in the appropriate column of table 10. The terminal screws are then loosened and the part of the conductor which may have been affected by the terminal is inspected.		P
	During the test, terminals shall not work loose and there shall be no damage, such as breakage of screws or damage to the head slots, threads, washers or stirrups, that will impair the further use of the terminal.		P
9.5.3	The terminals are fitted with a rigid stranded copper conductor having the make-up shown in		P

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Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
	table 12.		
	After the test, no wire of the conductor shall have escaped from the clamping unit.		P
9.6	Test of protection against electric shock		P
9.7	Test of dielectric properties and isolating capability		P
9.7.1	Resistance to humidity	60℃,93%, 48h	P
9.7.2	Insulation resistance of the main circuit		P
9.7.3	Dielectric strength of the main circuit		P
9.7.4	Dielectric strength of the auxiliary and control circuits		P
9.7.5	Value of test voltage		P
9.7.6	Verification of impulse withstand voltages (across clearances and across solid		P
	insulation) and of leakage current across open contacts		
9.7.6.1	Verification of impulse withstand voltage across the open contacts (suitability for isolation)		P
	The test is carried out on a circuit-breaker fixed on a metal support.		P
9.7.6.2	Verification of impulse withstand voltage for the parts not tested in 9.7.6.1		P
9.7.6.3	Verification of leakage currents across open contacts (suitability for isolation)	<2mA	P
9.8	Test of temperature-rise and measurement of power loss	Terminal :42K; Enclosure :36K	P
9.9	28-day test		P
	The circuit-breaker is subjected to 28 cycles, each cycle comprising 21 h with a current equal to the rated current at an open circuit voltage of at least 30 V, and 3 h without current under the test conditions of 9.2.		P
	This temperature-rise shall not exceed the value measured during the temperature-rise test (see 9.8) by more than 15 K.		P
9.10	Test of tripping characteristic		P
9.10.1	Test of time-current characteristic		P
9.10.1.1	A current equal to 1,13 In (conventional non-tripping current) is passed for the conventional time (see 8.6.1 and 8.6.2.1) through all poles, starting from cold (see table 7).		P
	The circuit-breaker shall not trip.		P
9.10.1.2	A current equal to 2,55 In is passed through all poles, starting from cold.		P
9.10.2	Test of instantaneous tripping and of correct opening of the contacts		P
9.10.2.1	General		P

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Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
9.10.2.2	For circuit-breakers of the B-type		N
9.10.2.3	For circuit-breakers of the C-type		P
9.10.2.4	For circuit-breakers of the D-type		N
9.10.3	Test of effect of single-pole loading on the tripping characteristic of multipole circuit-breakers		N
9.10.4	Test of effect of ambient temperature on the tripping characteristic		P
a)	The circuit-breaker is placed in an ambient temperature of (35 ± 2) K below the ambient air reference temperature until it has attained steady-state temperature.		P
	A current equal to 1,13 In (conventional non-tripping current) is passed through all poles for the conventional time. The current is then steadily increased within 5 s to 1,9 In.		P
	The circuit-breaker shall trip within the conventional time		P
b)	The circuit-breaker is placed in an ambient temperature of (10 ± 2) K above the ambient air reference temperature until it has attained steady-state temperature.		P
	A current equal to In is passed through all poles.		P
	The circuit-breaker shall not trip within the conventional time.		P
9.11	Test of mechanical and electrical endurance		P
9.11.1	General		P
9.11.2	Test procedure		P
9.11.3	Following the test of 9.11.2 the sample shall not show: -undue wear – discrepancy between the position of the moving contacts and of the corresponding position of the indicating device; – damage to the enclosure permitting access to live parts by the test finger (see 9.6); – loosening of electrical or mechanical connections; – seepage of sealing compound.		P
9.12	Short-circuit tests		P
9.12.1	General		P
9.12.2	Values of test quantities		P
	All the tests concerning the verification of the rated short-circuit capacity shall be performed with the values stated by the manufacturer in accordance with the relevant tables of this standard.		P
	The value of the applied voltage is that which is necessary to produce the specified power frequency recovery voltage.		P

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Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
	The value of the power frequency recovery voltage (see 3.5.8.2) shall be equal to 110 % of the rated voltage of the circuit-breaker under test.		P
9.12.3	Tolerances on test quantities		P
9.12.4	Test circuit for short-circuit performance		P
	– a single-pole circuit-breaker (figure 3);		N
	– a two-pole circuit-breaker with one protected pole (figure 4a);		N
	– a two-pole circuit-breaker with two protected poles (figure 4b);		N
	– a three-pole circuit-breaker (figure 5);		N
	– a four-pole circuit-breaker (figure 6).		P
9.12.5	Power factor of the test circuit		P
9.12.6	Measurement and verification of I 2t and of the peak current (Ip)		P
9.12.7	Calibration of the test circuit		P
9.12.7.1	To calibrate the test circuit, links G having negligible impedance compared with that of the test circuit are connected in the positions shown in figures 3 to 6.		P
9.12.7.2	To obtain a prospective current equal to the rated short-circuit capacity of the circuit-breaker at the corresponding power factor as stated in table 17 impedances Z are inserted on the supply side of the links G.		P
9.12.7.3	To obtain a test current lower than the rated short-circuit capacity of the circuitbreaker, additional impedances Z1 are inserted on the load side of the links G, as shown in figures 3 to 6.		P
9.12.8	Interpretation of records		P
9.12.8.1	Determination of the applied and power frequency recovery voltages		P
9.12.8.2	Determination of the prospective short-circuit current		P
9.12.9	Condition of the circuit-breaker for test		P
9.12.9.1	Test in free air		P
9.12.9.2	Test in enclosures		P
	The test shall be performed with the circuit-breaker placed in an enclosure having the most unfavourable configuration under the most unfavourable conditions. The grid and the barrier of insulating material shown in figure H.1 are omitted.		P
9.12.10	Behaviour of the circuit-breaker during short-circuit tests		P
9.12.11	Test procedure		P
9.12.11.1	General		P
9.12.11.2	Tests at reduced short-circuit currents		P

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Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
9.12.11.2.1	Test on all circuit-breakers		P
	The additional impedances Z1 (see 9.12.7.3) are adjusted so as to obtain a current of 500 A or 10 times In, whichever is the higher, at a power factor between 0,93 and 0,98.		P
9.12.11.2.2	Short-circuit test on circuit-breakers rated 230 V, or 240 V or 230/400 V for verifying their suitability for use in IT systems		P
9.12.11.3	Test at 1 500 A		P
	For circuit-breakers having a rated short-circuit capacity of 1 500 A, the test circuit is calibrated according to 9.12.7.1 and 9.12.7.2, to obtain a current of 1 500 A at a power factor corresponding to this current according to table 17.		P
	Single-pole circuit-breakers are tested in a circuit, the diagram of which is shown in figure 3		N
	Two-pole circuit-breakers with one protected pole are tested in a circuit, the diagram of which is shown in figure 4a		N
	Two-pole circuit-breakers with two protected poles are tested in a circuit, the diagram of which is shown in figure 4b		N
	Three-pole circuit-breakers and four-pole circuit-breakers with three protected poles are tested in a circuit, the diagrams of which are shown in figures 5 and 6 respectively.		P
	For three-pole circuit-breakers, no connection is made between the neutral of the supply and the common point, if any, on the load side of the circuit-breaker.		P
	For four-pole circuit-breakers with three protected poles, the neutral of the supply is connected through the unprotected pole or the switched neutral pole to the common point on the load side of the circuit-breaker.		P
9.12.11.4	Test above 1 500 A		P
9.12.11.4.1	Ratio k between service short-circuit capacity and rated short-circuit capacity		P
	The ratio k between the service short-circuit capacity and the rated short-circuit capacity shall be in accordance with table 18.	K=0.75	P
9.12.11.4.2	Test at service short-circuit capacity (Ics)		P
9.12.11.4.3	Test at rated short-circuit capacity (Icn)		P
9.12.11.4	Test at the making and breaking capacity on an		P

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Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
.4	individual pole (Icn 1) of multipole circuit-breakers		
9.12.12	Verification of the circuit-breaker after short-circuit tests		P
9.12..12.1	Verifications after the tests at reduced short-circuit currents, at 1 500 A and at service short-circuit capacity		P
9.12.12.2	Verifications after the short-circuit test at rated short-circuit capacity		N
9.13	Mechanical stresses		P
9.13.1	Mechanical shock		P
9.13.1.1	Test device		P
	A wooden base A is fixed to a concrete block and a wooden platform B is hinged to base A. This platform carries a wooden board C, which can be fixed at various distances from the hinge and in two vertical positions.		P
	The end of board B bears a metal stop-plate D which rests on a coiled spring having a constant c of 25 N/mm.		P
9.13.1.2	Test procedure		P
	During the tests, the circuit-breaker shall not open.		P
9.13.2	Resistance to mechanical stresses and impact		P
9.13.2.1	After the test the samples shall show no damage within the meaning of this standard. In particular covers which, when broken, make live parts accessible or impair the further use of the circuit-breaker, operating means, linings and barriers of insulating material and the like, shall not show such damage.		P
9.13.2.2	Screw-in type circuit-breakers are screwed home in an appropriate base, a torque of 2,5 Nm being applied for 1 min.		P
9.13.2.3	Circuit-breakers designed to be mounted on a rail are mounted as for normal use, but without cables being connected and without any cover or coverplate, on a rail rigidly fixed on a vertical rigid wall.		P
	Plug-in circuit-breakers designed for surface mounting are mounted complete with the appropriate means for the plug-in connection but without cables being connected and without any cover-plate.		N
	During this test, the circuit-breaker shall not become loose and after the test the circuitbreaker shall show no damage impairing its further use.		P
9.13.2.4	Plug-in type circuit-breakers, the holding in position of which depends solely on		N

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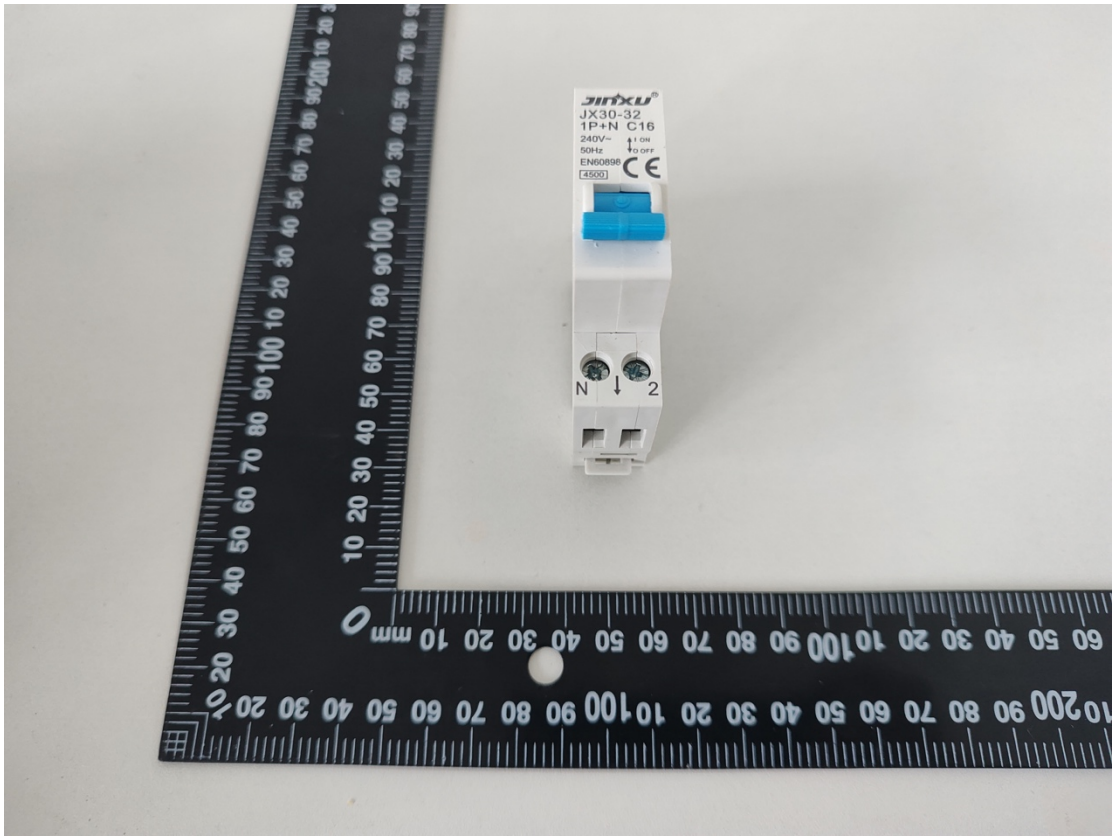
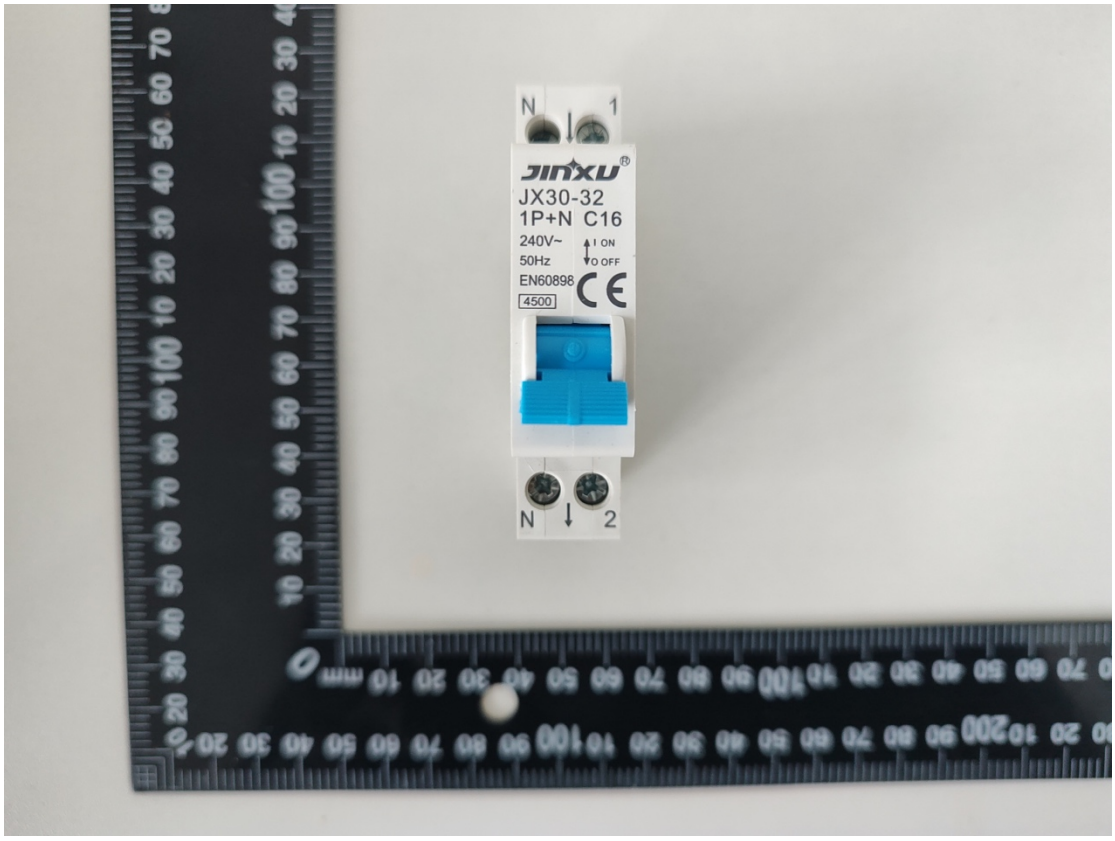
Clause	**Requirement-Test**	**Result-Remark**	**Verdict**
	their connections, are mounted, complete with the appropriate plug-in base but without cables being connected and without any cover-plate, on a vertical rigid wall.		
9.14	Test of resistance to heat		P
9.14.1	The samples, without removable covers, if any, are kept for 1 h in a heating cabinet at a temperature of (100 ± 2) °C; removable covers, if any, are kept for 1 h in the heating cabinet at a temperature of (70 ± 2) °C.		P
	During the test the samples shall not undergo any change impairing their further use and sealing compound, if any, shall not flow to such an extent that live parts are exposed.		P
	After the test and after the samples have been allowed to cool down to approximately room temperature, there shall be no access to live parts which are normally not accessible when the samples are mounted as for normal use, even if the standard test finger is applied with a force not exceeding 5 N.; markings shall still be legible.		P
9.14.2	External circuit-breaker parts made of insulating material necessary to retain in position current-carrying parts and parts of the protective circuit are subjected to a ballpressure test by means of the apparatus shown in figure 16 except that, where applicable, the insulating parts necessary to retain in position the terminals for protective conductors in a box shall be tested as specified in 9.14.3		P
9.14.3	External circuit-breaker parts made of insulating material not necessary to retain in position current-carrying parts and parts of the protective circuit, even though they are in contact with them, are subjected to a ball-pressure test in accordance with 9.14.2, but the test is made at a temperature of (70 ± 2) °C, or (40 ± 2) °C plus the highest temperature rise, determined for the relevant part during the test of 9.8, whichever is the higher.		P
9.15	Resistance to abnormal heat and to fire (glow-wire test)	Enclosure :650°C,	P
9.16	Test of resistance to rusting		P

Annex： Technical Information

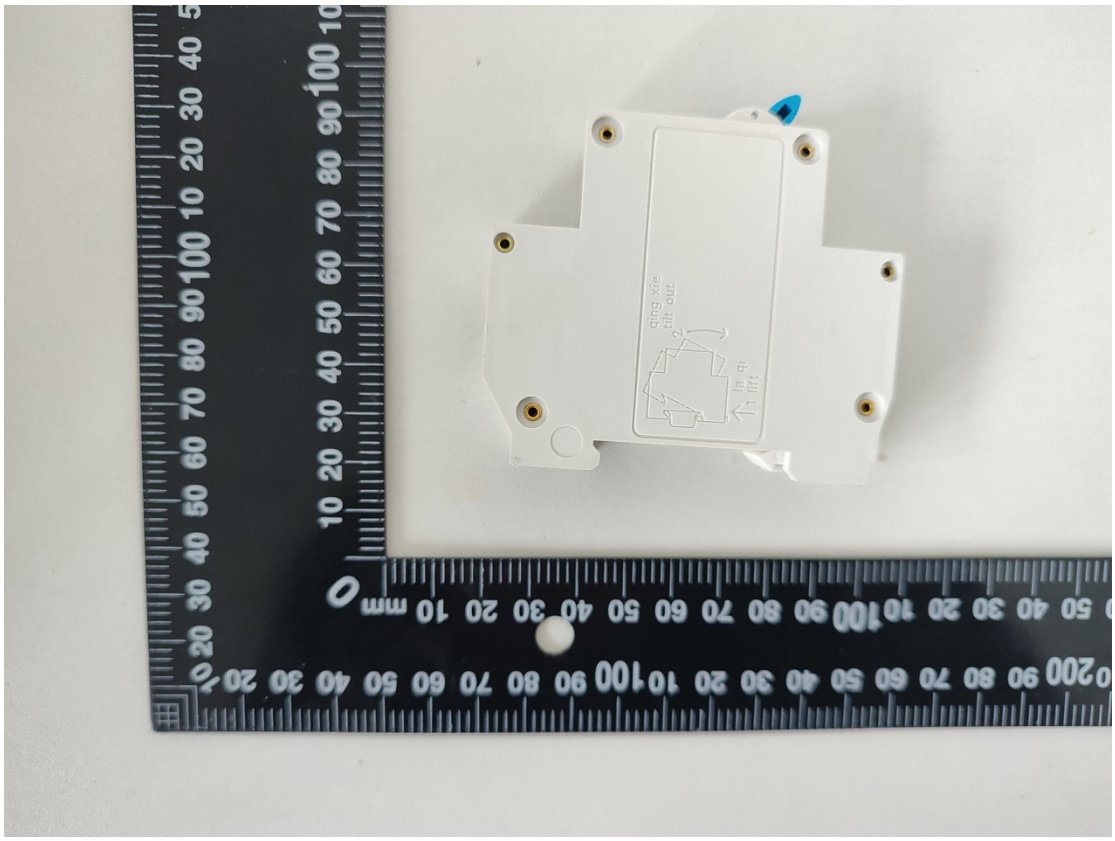
(1) Product Photos



A.1



A.2



A.3