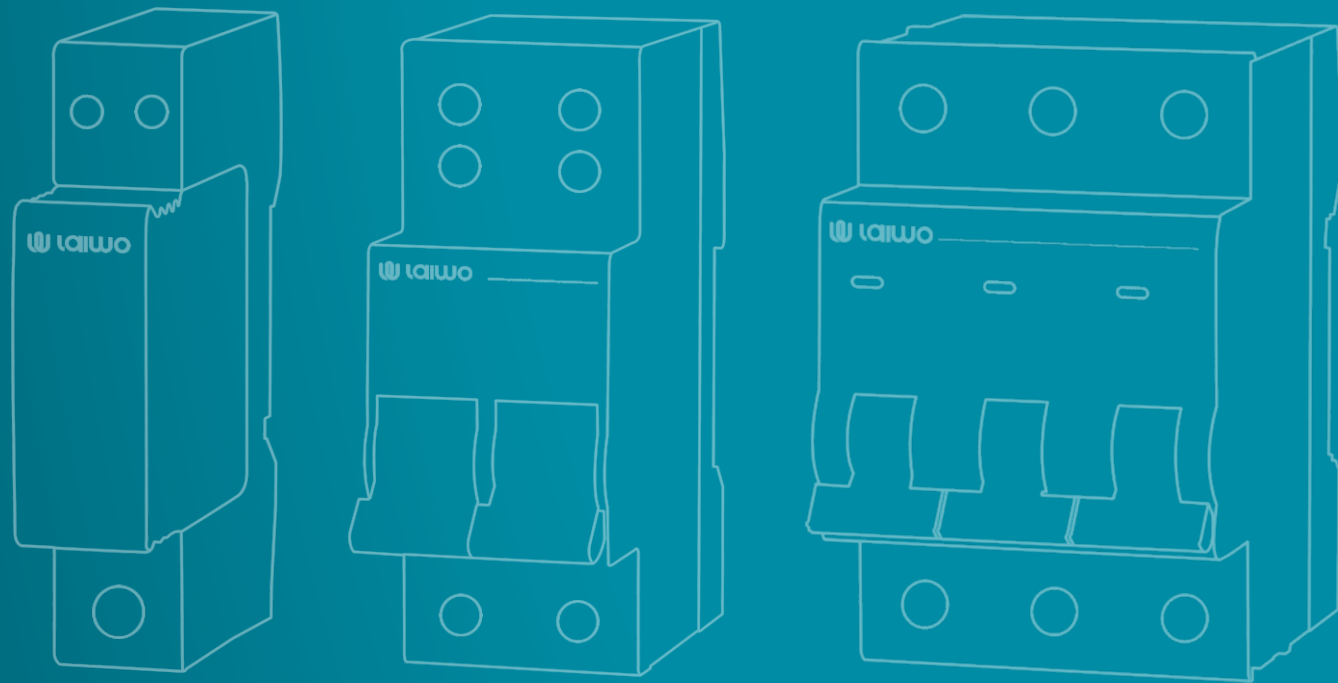




laiwo

WENZHOU LAIWO ELECTRICALTECHNOLOGY CO.,LTD

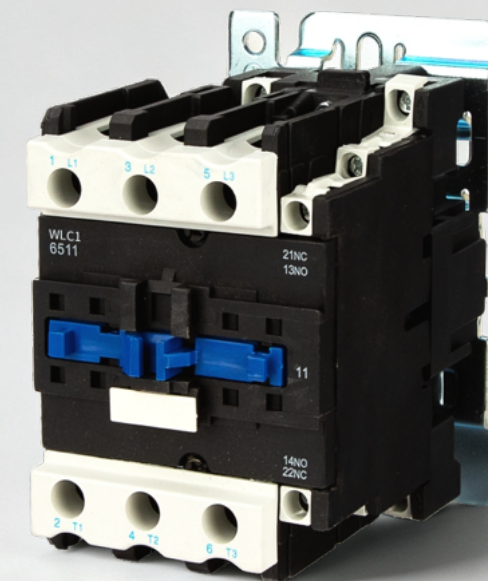
Whatsapp: +86-15067706272

E-mail: sales2@wosom.cn

Tel: +86-15067706272

Address: Unit 10, No.115, Xinguang Avenue, Liushi, Wenzhou, P.R.China

laiwo



PRODUCT SELECTION MANUAL



COMPANY PROFILE



NUMBER OF
EXPORTING COUNTRIES

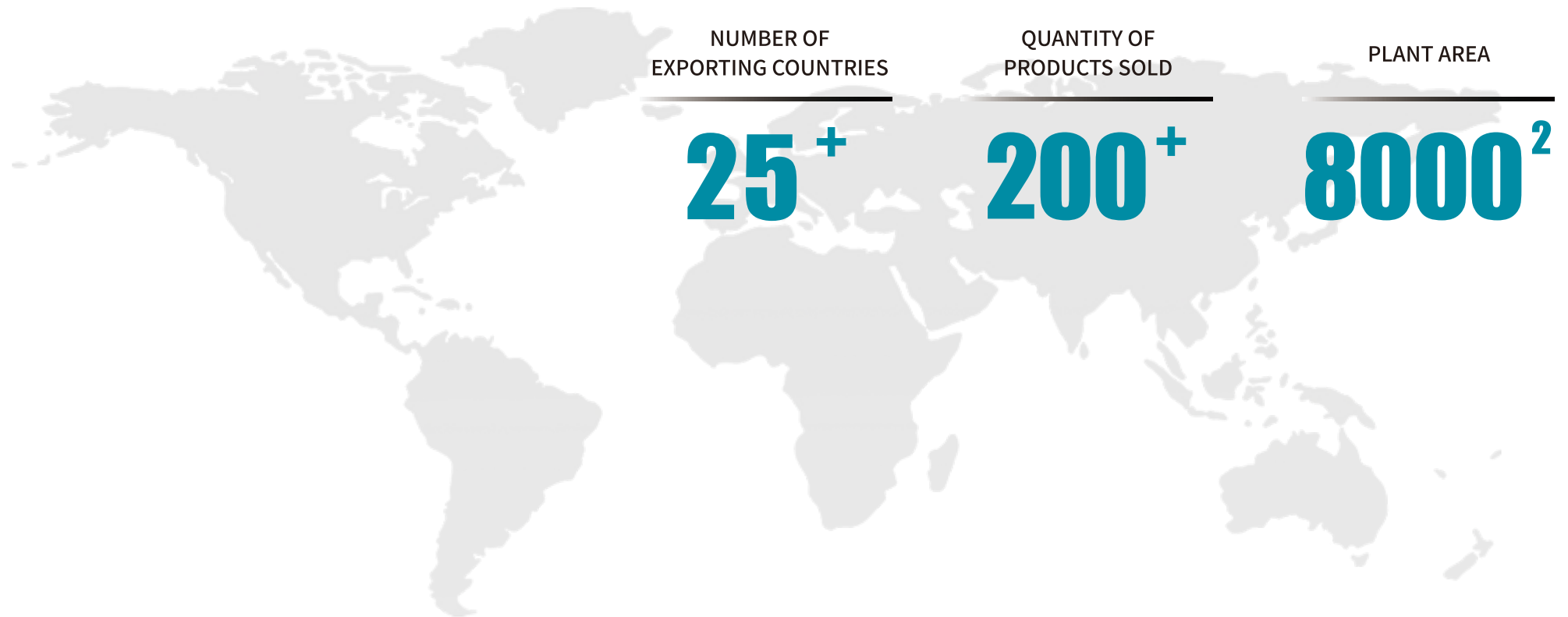
25⁺

QUANTITY OF
PRODUCTS SOLD

200⁺

PLANT AREA

8000²



One-stop
marketing
service

LAIWO ELECTRICAL TECHNOLOGY CO., LTD was established in 2002, headquartered in the global reputation of Liushi electric capital. As a company specializing in the development, production and sales of electrical products, we are committed to providing customers with high quality and reliable electrical solutions. The company's main products cover circuit breakers, isolating switches, surge protectors, fuses and other fields, these products play a vital role in a variety of electrical systems, can effectively protect equipment from power fluctuations and overload, to ensure the safe and stable operation of electrical systems. All products have passed the ISO9001 quality system certification, as well as CCC, CE, UKCA, TUV, C B, SEMKO and other certifications, to provide customers with high quality assurance. It owns the Levo Watson brand.

The company has always been adhering to the "customer first, quality first" business philosophy, committed to providing customers with high quality, reliable electrical solutions. We will also continue to optimize the service system, establish a perfect pre-sale, sale and after-sales service mechanism, fully meet customer needs, to provide you with a more convenient and efficient service experience. We are willing to listen to customers' opinions and suggestions, constantly improve and innovate, and grow together with you.

HONOR AND QUALIFICATION



Patent support, quality worry free

The company has a number of patent certificates, more surge products test report, as well as isolation switch, leakage circuit breaker, fuse, distribution box and other qualification certificates for quality escort. With innovative technology, Levo is the place for you to experience excellence.



30⁺

NUMBER OF CERTIFICATES



- CCC certification
- Quality management system certification
- Back protector test report
- Surge form test report
- CE certification
- SEMKO certification
- UKCA certification
- TUV certification



ENTERPRISE HISTORY



SET UP

June 2002

Wenzhou laiwo electrical technology co., ltd was established in dongfeng industrial zone of liushi city

DEVELOP

February 2009

Has a production base, established a modern factory located in Taizhou Sanmen

LEAP

November 2010

Expand overseas markets, set up a subsidiary in the UK, and enhance international competitiveness

OPTIMIZE

February 2020

The company launched the "laiwo" brand, focusing on brand building and marketing

CREATE

December 2021

Through the unremitting efforts of all employees, the company achieved a high performance in 2021

INNOVATE

Continuous innovation and progress, to provide customers with better products and services.

04 INDUSTRIAL CONTROL APPLIANCES

WLC1 AC Contactor	03
WLR2 Thermal Overload Relay	06
WMC Modular Contactor	07
WGV2 Motor Protector Circuit Breaker	08

05 MOULDED CASE CIRCUIT BREAKER

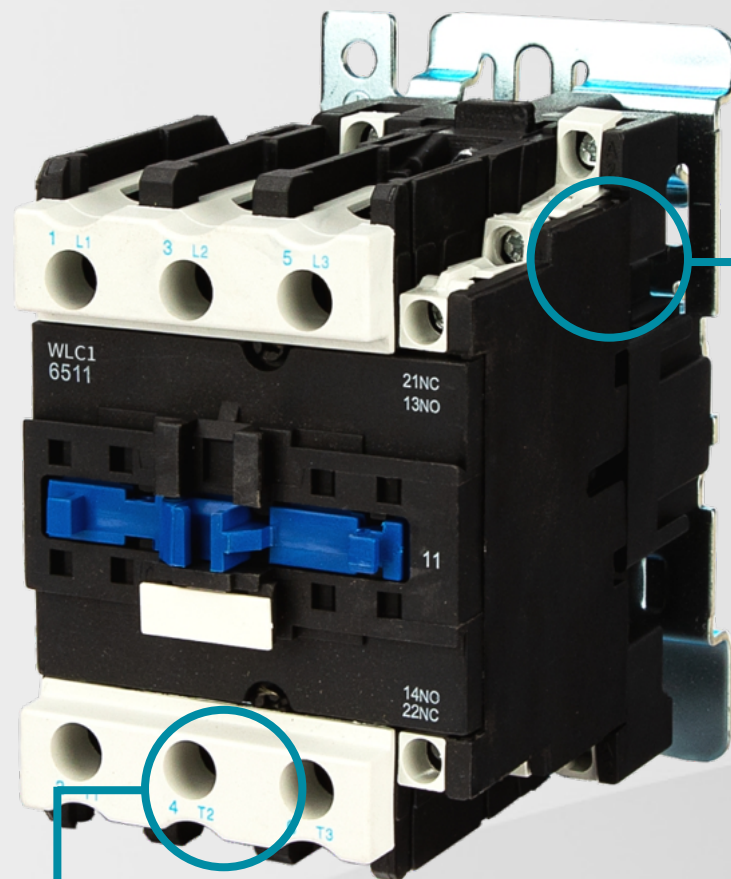
WSMH Moulded Case Circuit Breaker	11
WSML Moulded Case Circuit Breaker	14
WSMC Moulded Case Circuit Breaker	15

PRODUCT CATALOG



04

INDUSTRIAL CONTROL APPLIANCES



flame-retardant plastic shell

The contacts are sensitive, and it is safe and durable.



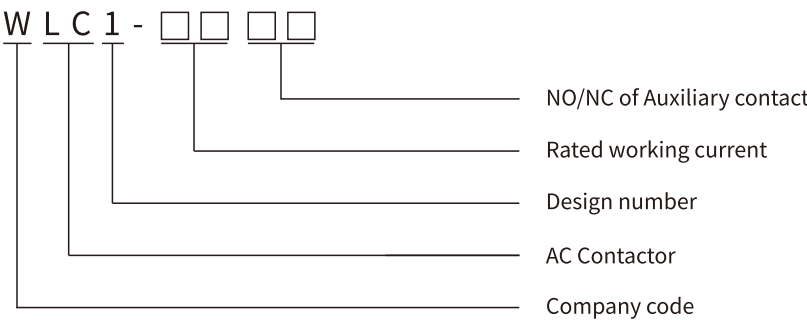
The control buttons are flexible to operate

The current setting is precise

WLC1 AC Contactor



Product model meaning



Product characteristics

WLC1 series AC contactor (hereinafter referred to as contactor), mainly used in AC 50HZ~(60HZ), voltage to 690V, current to 95A circuit, for remote connectionAnd break circuit, frequent start and control of AC motor, and can be combined with appropriate thermal relays to form an electromagnetic starter to protect the circuit may occur operating overload. The contactor is improved on the LC1-D series of French TE company, which can completely replace imported products. Products comply with :IEC60947-4-1 standards.

Working conditions and installation conditions

- The ambient air temperature is :-5°C~+40°C, and its average value within 24 hours does not exceed +35°C;
- Altitude: no more than 2000m;
- Atmospheric conditions: the relative humidity of the air at +40~C does not exceed 50%;
- Pollution level: Level 3;
- Installation category: Class III;
- Installation conditions: the vertical inclination of the installation surface is not more than 5°;
- Shock vibration: The product shall be installed and used where there is no significant shaking, shock or vibration.

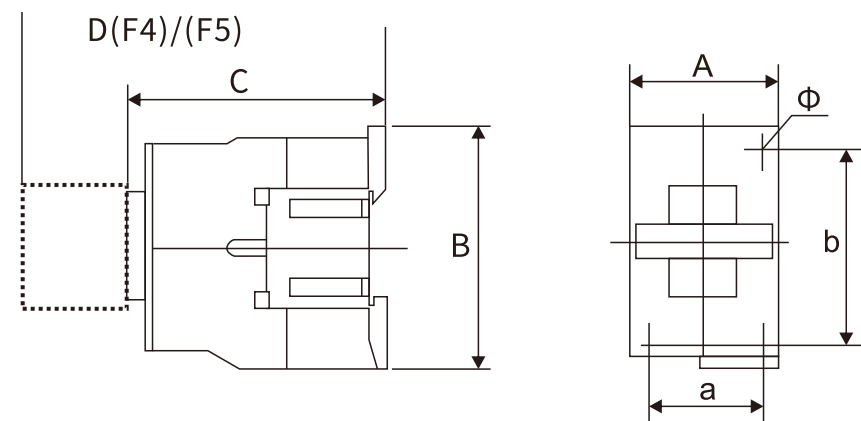
Technical parameter

Product model			WLC1-09	WLC1-12	WLC1-18	WLC1-25	WLC1-32	WLC1-40	WLC1-50	WLC1-65	WLC1-80	WLC1-95							
Rated working current A	380/400V	AC-3	9	12	18	25	32	40	50	65	80	95							
		AC-4	3.5	5	7.7	8.5	12	18.5	24	28	37	44							
	660/690V	AC-3	6.6	8.9	10.6	18	21	34	39	42	49	49							
		AC-4	1.5	2	3.9	4.4	7.5	9	12	14	17.3	21.3							
Specify heating current A			20	20	32	40	50	50	80	80	95	95							
Rated insulation voltage V			690	690	690	690	690	690	690	690	690	690							
Controllable three-phase squirrel cage Motor power (AC-3)KW			2.2	3	4	5.5	7.5	11	15	18.5	22	25							
			4	5.5	7.5	11	15	18.5	22	30	37	45							
			5.5	7.5	10	15	18.5	30	37	37	45	45							
Operating frequency times /h	Electrical life	AC-3	1200	1200	1200	1200	600	600	600	600	500	600							
		AC-4	300	300	300	300	300	300	300	300	300	300							
	Mechanical life		3600	3600	3600	600	3600	3600	3600	3600	3600	3600							
Electrical life Ten thousand times	AC-3		100	100	100	100	80	80	60	60	60	60							
	AC-4		20	20	20	20	20	15	15	15	10	10							
Mechanical life thousands of times			1000	1000	1000	1000	800	800	800	800	300	600							
Fitted with fuse model			RT16-20	RT16-20	RT16-32	RT16-40	RT16-50	RT16-63	RT16-80	RT16-80	RT16-100	RT16-125							
Cold pressed end	Flexible wire with cold pressed end The cord does not have a cold pressed end Hard line	root	1~2	1~2	1~2	1	2	1	2	1	2	1	2	1	2	1	2		
		mm ²	2.5	2.5	4	4	4	4	10	10	16	16	16	16	50	25	50	25	
			4	4	6	10	6	10	6	16	10	25	16	25	16	50	35	50	35
			4	4	6	6	6	6	6	10	10	25	-	25	-	50	-	50	-
Coil power	50Hz	Absorption VA	70	70	70	110		110		200		200		200		200			
		Maintain VA	8	8	8	11		11		20		20		20		20			
	Power W		1.8~2.7	1.8~2.7	1.8~2.7			3~4		6~10		6~10		6~10		6~10		6~10	
Range of action			The suction voltage is 85%~100%Us; The release voltage is 20%~75Us																
Basic parameters of auxiliary contact			AC-15:360VA+Ds-13:33W lth:10A																

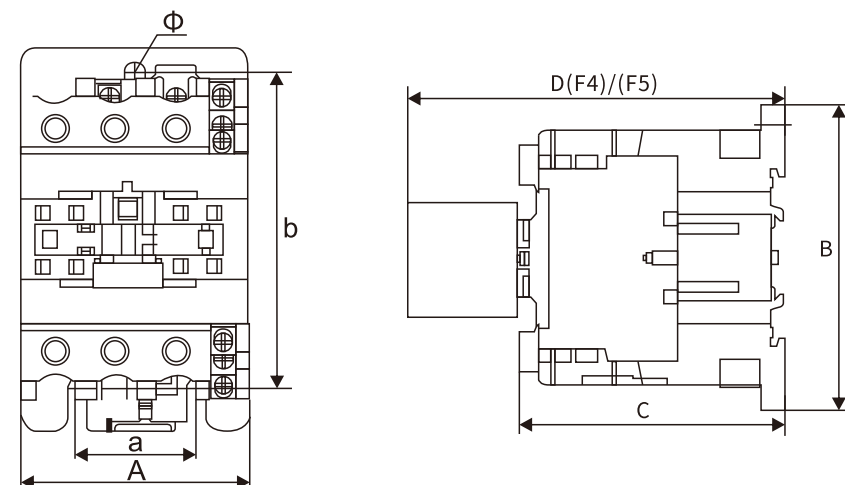
Coil rated control power supply voltage U_s and code

Coil voltage U_s (V)	24	36	48	110	127	220	240	380	415	440	480	500	600
50Hz	B5	C5	E5	F5	G5	M5	U5	Q5	N5	R5	T5	S5	X5
60Hz	B6	C6	E6	F6	G6	M6	U6	Q6	N6	R6	T6	S6	X6
50/60Hz	B7	C7	E7	F7	G7	M7	U7	Q7	N7	R7	T7	S7	X7

Product selection



WLC1-09~32



WLC1-40~95

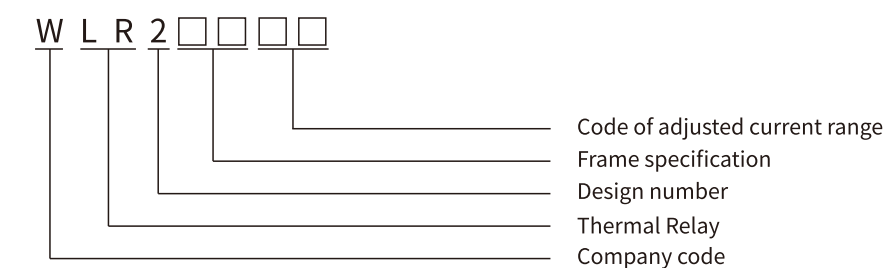
Product model	Amax	Bmax	Cmax	Dmax	Emax	a	b	Φ
WLC1-09-12	47	76	82	120.5	140.5	34/35	50/60	4.5
WLC1-18	47	76	87	125.5	145.5	34/35	50/60	4.5
WLC1-25	57	86	95	133.5	153.5	40	48	4.5
WLC1-2	57	86	100	138.5	158.5	40	48	4.5
WLC1-4011~6511	77	129	116	154.5	174.5	40	105	6.5
WLC1-4004~6504	84	129	116	154.5	174.5	40	105	6.5
WLC1-4008~6508	84	129	127	154.5	174.5	40	105	6.5
WLC1-8011~9511	87	129	127	165.5	185.5	40	105	6.5
WLC1-8004~9504	96	129	122	160.5	180.5	40	105	6.5
WLC1-8008~9508	96	129	135	160.5	80.5	40	105	6.5

unit:mm

WLR2 Thermal Overload Relay



Product model meaning



Product characteristics

The WLR2 series thermal overload relay (hereinafter referred to as thermal relay) is suitable for AC 50Hz/60Hz. Overload and phase failure protection for AC motors with a voltage of 690V and a current of 0.1-80A that operate continuously or intermittently.

The thermal relay also has functions such as temperature compensation, action indication, automatic manual reset, and stop, ensuring stable and reliable product performance.

The thermal relay can be connected and installed with the contactor, or it can be installed independently.

Technical parameter

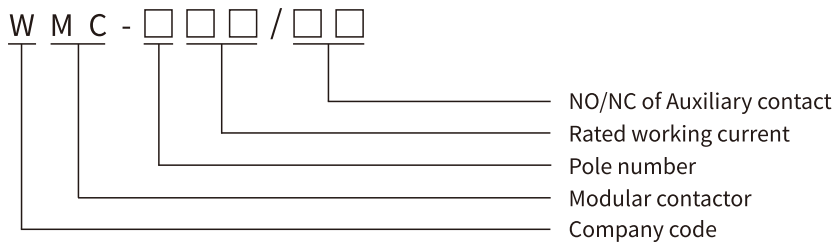
- Rated insulation voltage: 690V.
- Rated operating voltage: Suitable for circuits with an alternating current of 50Hz/60Hz and a rated voltage of 690V.
- Rated current: The current ranges from 0.1A to 80A. The specific rated current varies for different models.
- Tripping class: 10A (compliant with IEC60947 - 4 - 1).
- Number of poles: 3P.
- Ambient temperature for the working limit: -40°C to 70°C.
- Mechanical life: Generally 100,000 operations.
- Electrical life: Usually 3 years.
- Installation method: It can be installed by inserting into the contactor or installed independently.

Type	Rated current range(A)	Type	Rated current range(A)
WLR2-1301	0.10~0.16	WLR2-1321	12~18
WLR2-1302	0.16~0.25	WLR2-1322	16~24
WLR2-1303	0.25~0.40	WLR2-1332	23~32
WLR2-1304	0.40~0.63	WLR2-1335	30~38
WLR2-1305	0.63~1	WLR2-3353	23~32
WLR2-1306	1~1.7	WLR2-3355	30~40
WLR2-1307	1.6~2.5	WLR2-3357	37~50
WLR2-1308	2.5~4	WLR2-3359	48~65
WLR2-1310	4~6	WLR2-3361	55~70
WLR2-1312	5.5~8	WLR2-3363	63~80
WLR2-1314	7~10	WLR2-3365	80~104
WLR2-1316	9~13		

WMC Modular Contactor



Product model meaning



Product characteristics

- Compact modular design.
- Elegant appearance. mounting instruction diagram is appended for convenient operation.
- No noise during operation.
- AC contactor for domestic applications & 35mm Din rail Mounting.
- Suitable for housing within a consumer unit or modular enclosure.
- Electric rating up to 20A, 25A, 32A, 40A, 63A.
- Complies with BS EN 60948-4-1.

Technical parameter

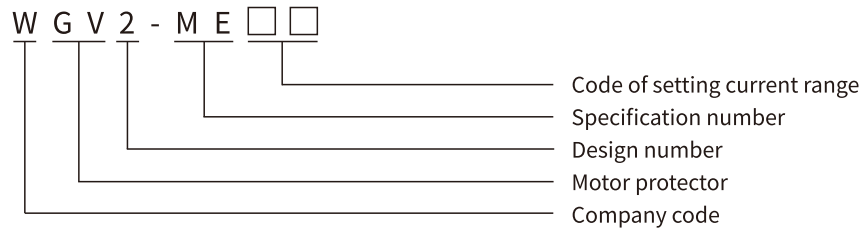
WMC CONTACTOR -50HZ

Type		Rated current(In)		Control voltage (VAC)(50/60Hz)	Contact	Width (Multiples of 9mm)
		AC-7a	AC-7b			
1P		16A	6A	24 110 230	1NO 1NC	2
		20A	7A			
		25A	9A			
2P		16A	6A	24 110 230	2NO 1NC+1NC 2NO	2
		20A	7A			
		25A	9A			
		32A	12A	24 110 230	2NO 1NC+1NC 2NO	4
		40A	18A			
		63A	25A			
3P		100A	-	24 110 230	2NO	6
		16A	6A	24 110 230	3NO 3NC	4
		20A	7A			
		25A	9A			
		32A	12A	24 110 230	3NO 3NC	6
		40A	18A			
4P		63A	25A	24 110 230	4NO 2NO+2NC 4NC 3NO+1NC	4
		16A	6A			
		20A	7A			
		25A	9A	24 110 230	4NC 2NO+2NC 4NO 3NO+1NC	6
		32A	12A			
		40A	18A			
		63A	25A	24 110 230	4NO	12
		100A	-			

WGV2 Motor Protector Circuit Breaker



Product model meaning



Product characteristics

WGV2 series motor protection circuit breakers are mainly used for the overload and short circuit protection of the motor in AC 50/60Hz, up to 660V, 0.1-80A power circuit, as a full-voltage starter to start and cut off the motor, under the AC3 load or for the overload and short circuit protection of the circuit and power equipment in the power distribution network.

Technical parameter

Type	Rated standard power of 3-phase motors 50/60Hz in category AC-3(kw)						Setting range(A)
	220V	380V	415V	440V	500V	660V	
WGV2-M01	-	-	-	-	-	-	0.1~0.16
WGV2-M02	-	-	-	-	-	-	0.16~0.25
WGV2-M03	-	-	-	-	-	-	0.25~0.4
WGV2-M04	-	-	-	-	-	0.37	0.4~0.63
WGV2-M05	-	-	-	0.37	0.37	0.55	0.63~1
WGV2-M06	-	0.37	-	0.55	0.75	1.1	1~1.6
WGV2-M07	0.37	0.75	0.75	1.1	1.1	1.5	1.6~2.5
WGV2-M08	0.75	1.5	1.5	1.5	2.2	3	2.5~4
WGV2-M10	1.1	2.2	2.2	3	3.7	4	4~6.3
WGV2-M14	2.2	4	4	4	5.5	7.5	6~10
WGV2-M16	3	5.5	5.5	7.5	7.5	9	9~14
WGV2-M20	4	7.5	9	9	9	11	13~18
WGV2-M21	5.5	11	11	11	11	15	17~23
WGV2-M22	5.5	11	11	11	15	18.5	20~25
WGV2-M32	7.5	15	15	15	18.5	26	24~32

05

MOULDED CASE CIRCUIT BREAKER

Thermoset housing,
flame retardant material



Widened insulated handle,
Improve operating comfort

Double insulated
internal structure,
Easy to mount accessories



Thickened galvanized
copper sheet,
excellent electrical conductivity

WSMH Moulded Case Circuit Breaker



Product characteristics

Maximized Insulation Performance:

- Rated insulation voltage, Ui: 1000 V
- Rated impulse withstand voltage, Uimp: 8 kV

High Breaking Capacity (Ics=100% x Icu)

- 38-55kA @ 415Vac(125-250AF)
- 65-85kA @ 415Vac(400-800AF)

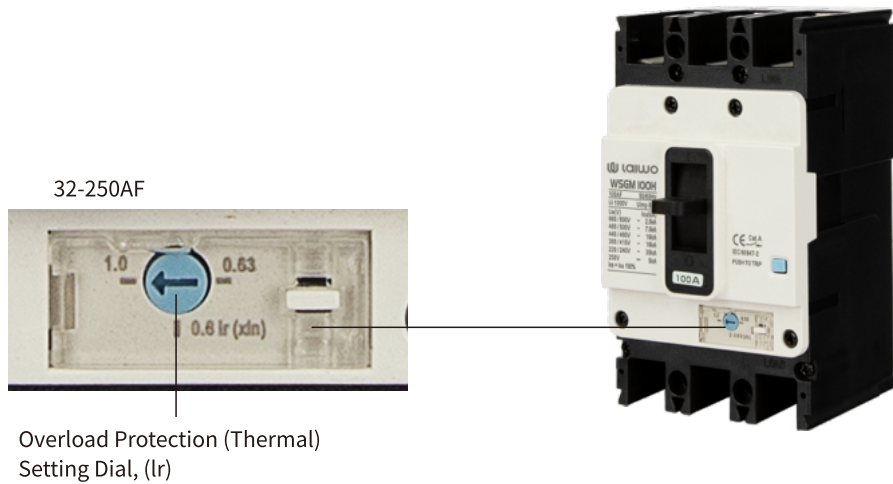
High Breaking Capacity(@415V)

- 38-55kA(125-250AF)
- 65-85kA(400-800AF)

Adjustable Rated Current

As applying to adjustakle rated current design, it is possible toprotect circuit optimally according to the load factor, Adjustablerange of rated currents. (Molded case circuit breakers)

- 125-250AF:80%-90%-100% ofrated current
- 400-800AF:804-90%-100% ofrated current



Trip Unit Characteristics : Thermal Magnetic

Product model		16	20	25	32	40	50	63	75	80	100	125
MCCB	WSMH 125	●	●	●	●	●	●	●	●	●	●	●
Time Pick-Up Characteristics [I _r]												
Settings(A)	Fixed type	16	20	25	32	40	50	63	75	80	100	125
	0.8xI _n	12.8	16	20	25.6	32	40	50.4	60	64	80	100
	0.9xI _n	14.4	18	22.5	28.8	36	45	56.7	67.5	72	90	112.5
	1.0xI _n	16	20	25	32	40	50	63	75	80	100	125
Instantaneous Pick-Up Characteristics [I _i]												
Settings(A)	10xI _n	400				400	500	630	750	800	1000	1250
	Instantaneous pick-up characteristics(A)	320				320	400	504	600	640	800	1000
	The minimum operating current(A)	480				480	500	756	900	960	1200	1500
Neutral Pole Protection												
4P3D		Unprotected										
4P4D		-										

Product model		100	125	150	160	175	200	225	250
MCCB	WSMH 160	●	●	●	●				
	WSMH 250	●	●	●	●	●	●	●	●
Time Pick-Up Characteristics [I _r]									
Settings(A)	Fixed type	100	125	150	160	175	200	225	250
	0.8xI _n	80	100	120	128	140	160	180	200
	0.9xI _n	90	112.5	135	144	157.5	180	202.5	225
	1.0xI _n	100	125	150	160	175	200	225	250
Instantaneous Pick-Up Characteristics [I _i]									
Settings(A)	10xI _n	1000	1250	1500	1600	1750	2000	2250	2500
	Instantaneous pick-up characteristics(A)	800	1000	1200	1280	1400	1600	1800	2000
	The minimum operating current(A)	1200	1500	1800	1920	2100	2400	2700	3000
Neutral Pole Protecion									
4P3D		Unprotected							
4P4D		-							

Technical parameter

Product model			WSMH 125H		WSMH 160H		WSMH 250H	
Frame (AF)			125		160		250	
Pole (P)			2,3,4		2,3,4		2,3,4	
Rated current,at 40℃ (A)			16,20,25,32,40,50,63,75,80,100,125		100,125,150,160		100,125,150,160, 175, 200, 225, 250	
Rated short-crcut breakdng capacity [Icu] (kA rms)	Recognition code for order		H	L	H	L	H	L
	AC660/690V		8	10	8	10	8	10
	AC480/500V		26	35	26	35	26	35
	AC440/460V		38	55	38	55	38	55
	AV380/415V		38	55	38	55	38	55
	AC220/240V		85	100	85	100	85	100
DC250V(2P)		20	30	20	30	20	30	
Service breaking capacity [Ics=%Icu]			100	100	100	100	100	100
Enduranco (Durability)	Mechanical		30000		25000		25000	
	Electrica		10000		10000		10000	
Trlp Device								
Thermal magnctic	Long time [LT]	Fxed	(1.0)×In		(1.0)×In		(1.0)×In	
		Adjustable	(0.8-0.9-10)×In		(08-0.9-1.0)×In		(0.8-0.9-1.0)×In	
		Instantaneous [NST]		16-32A:40DA, 40-125A:10×In		10×In		10×In
Access Ory								
Internal	Auxiliary switch AUX		●		●		●	
	Alam switch ALT		●		●		●	
	Shunt trip SHT		●		●		●	
	Undervoltage trip UVT		●		●		●	
Extemal	Rotary handle	Front contact TFG	●		●		●	
		Extended TFH	●		●		●	
	Motor operator MOT		●		●		●	
	Mechanical interlock MF		●		●		●	
	Locking device PLD		●		●		●	
	Plug-in	TDM(LINE/LOAD)	● (3P Only)		● (3P Only)		● (3P Only)	
		TDM(LNE only)	● (3P Only)		● (3P Only)		● (3P Only)	
		TDF(LINE only)	● (3P Only)		-		-	
		TDA(1 row)	● (3P Only)		-		-	
		TDA(2 row)	● (3P Only)		-		-	
	Cage terminal block CTB		●		●		●	
	Insulation terminal cover TCF		●		●		●	
	nsulation barrier TQQ		●		●		●	
Termina extentions TBB		-		●		●		
Connection Installation		Front connection	Terminal screw		Teminal screw,Terminal busbar			
		Rear connection	Horizontal/Vertica					
		Plug-in	Switchboard type (Line&Load,Line ony),Distribution board type					
Dimensions (mm)		a(2/3/4P)	60/90/120		105/105/140		105/105/140	
		b	155		165		165	
		c	68		68		68	
Weight (kg)		2/3/4P	0.8/1.0/1.3		1.1/1.3/1.7		1.1/1.3/1.7	

WSML Moulded Case Circuit Breaker



Product characteristics

WSML series plastic cover type circuit breaker (hereinafter referred to as circuit breaker) is one of the technologies adopted by the company in international advanced design, manufacturing and development, its fixed isolation voltage is 690V, suitable for switch 50Hz, fixed working voltage is 400v and below. A circuit rated at 800A that acts as a motor starter for frequent switching and low frequency. The circuit breaker has overload and short circuit protection devices, as well as low voltage protection circuits and power equipment from damage.

Technical parameter

Shell Frame Current (WSML)			50	60	100	225	400
Frame model			WSML				
Breaking capacity	(kA), Icu	415VAC	5	5	10	18	25
Number of poles			2,3	2,3	2,3,4	2,3,4	2,3,4
model	2 Pole		52b	62b	102b	202b	402b
	3 Pole		53b	63b	103b	203b	403b
	4 Pole				104b	204b	404b
Rated current(A)	(A)		5, 10, 15, 20, 30, 40, 50	60	5, 10, 15, 20, 30, 40, 50, 60, 75, 100	100, 125, 150, 175, 200, 225, (250*)	250, 300, 350, 400
Technical parameter	IEC/EN60947-2						
Rated voltage	(V), Ue(50/60Hz)		600	600	600	600	600
Rated insulation voltage	(V), Ui(50/60Hz)		690	690	690	690	690
Rated pulse voltage	(kv), Uimp		6	6	6	6	6
Ultimate breaking capacity	(kv), Icu AC50/60Hz	220/240V	10	10	25	65	125
		380V	7.5	7.5	14	35	100
		415V	5	5	10	35	85
		440/460V	5	5	10	35	85
		480/500V	2.5	2.5	7.5	25	65
		600V	2.5	2.5	5	18	30
Running breaking capacity (%Icu), ics			50	50	50	50	50
Type of use			A	A	A	A	A
Life (number of operations)	machine		8500	8500	8500	7000	4000
	electricity		1500	1500	1500	1000	1000

WSMC Moulded Case Circuit Breaker



Product characteristics

WSMC series plastic shell type circuit breaker (hereinafter referred to as circuit breaker) is one of the new circuit breakers developed by our company using international advanced design and manufacturing technology. Its rated insulation voltage is 800V(WSMC-63 is 500V), suitable for AC 50Hz, rated operating voltage 690V and below, rated operating current 1250A (WSMC-63 is 400V) of the infrequent switching circuit, and infrequent motor start.

Product selection

Product model	Shell frame Rated current (A)	Rated current (A)	Rated operating voltage (V)	Rated insulation voltage (V)	Rated limit short-circuit breaking capacity (kA) 600V/690V	Rated working short-circuit breaking capacity (kA)400V/690V	Pole	Discharge distance
WSMC-63L	63	6,10,16, 20,25,32, 40,50,63	400	500	15*	7.5*	2	≤50
WSMC-63M	63				25*	12.5*	3	
WSMC-100L	100	16,20,25, 32,40,50, 63, 80, 100	690	800	35/8	17.5/4	3	≤50
WSMC-100M	100				50/10	25/5	2、3、4	
WSMC-225L	225	100,125, 160,180, 200,225	690	800	35/10	17.5/4	3	≤50
WSMC-225M	225				50/10	25/5	2、3、4	
WSMC-400L	400	225,250, 315,350, 400	690	800	50/10	25/5	3、4	≤100
WSMC-400M	400				65/10	32.5/5	3、4	
WSMC-600L	630	400, 500, 600	690	800	50/10	25/5	3、4	≤100
WSMC-630N	630				65/10	32.5/5	3、4	
WSMC-630M	630				100/20	50/10	3、4	