

DONG-A PRODUCTS GUIDE

Molded Case Circuit Breakers
Earth Leakage Circuit Breakers
Air Circuit Breakers

Magnetic Contactors / Switches
Thermal Overload Relays
Auto Transfer Switches



DONG-A ELECTRIC CO.,LTD.

MADE IN KOREA

Dreams

Promoting happiness is the aim of DONG-A technology.
Our state-of-the-art technology cherishes humanism and helps realize dreams.

Imagination

DONG-A's cutting-edge technology is taking the lead in the electric and electronic industrial field.
We dream of a digital world that is prosperous, convenient, and promising.

Service

DONG-A's service aims at a greener and cleaner environment with its goal to harmonize man and nature.
The services provided are future-oriented and environment-friendly.

ELCB & MCCB (Molded Case Circuit Breakers & Earth Leakage Circuit Breakers) Page 3~8



- DBE/DB Series are small and economical breaker which protects from a fire danger and equipment damages caused by overload, short. We choose complete electric type and thermal electric type which is excellent performance characteristic.
- Also, as we standardize its size, has enormous compatibility to be easy attached other types and accessories.
- All Your Requirements Fill with Contentment.

Features

- As same size as MCCB and ELC
- 4p ELCB is also same size as MCCB, can build a Distribution Board easily
- Simplified installation, high breaking capacity, optimized protection
- Easy trip check by using built in trip unit

Breaker for Distribution Board (MCCB & ELCB) Page 9~13

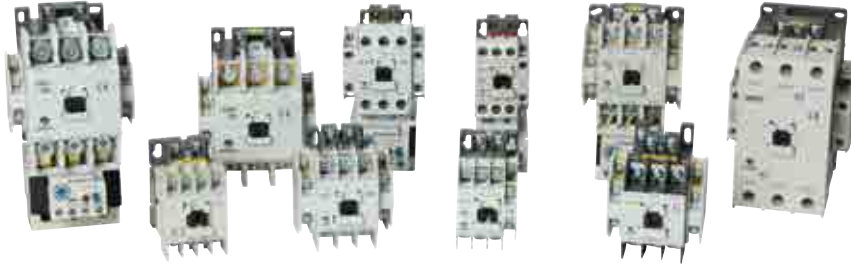


Features

- As same size as Wiring Breaker and Electric Leakage Breaker(30~100AF)
- Simplified and minimize 60% of size compare of ex-product in 3P & 4P
- Easy to build a Distribution Board by being same size of other breakers

MC&MS (Magnetic Contactors & Magnetic Switches) Page 14~21

- Our magnetic contactors are based on accumulated technique long time, and suitably designed to export by acquired international certificate. In addition, simple wiring and inspect give customer satisfaction.
- Using a silver alloy contact and stable movement guarantee long mechanical and electronic life.



Features

- No noise (Electric & Mechanical)
- High durability by increasing reliability and stabilizing of a point of contact
- Minimized power consumption
- Easy detach by using modularized sub-contact
- Installed cover for protect from touch
- AC Controls DC excitation system for voltage dip
- Acquired overseas certificate (CE, VDE, CCC, TUV)

AIR CIRCUIT BREAKERS & AUTOMATIC TRANSFER SWITCHES Page 25~28



Features of DACB

- Satisfy with diversity and safety
- Elevated reliability with structure confirming cause of problem by each step



Feature of DATS

- Excellent latching equipment has an ample current flow capability by choosing two-coil method (TS, TN TYPE)
- Standing out in melting over current strength and one-coil method (MS/MSN TYPE)
- It is designed to protect the danger of occurrence of accidents caused by phase difference effectively, especially at single phase-using points.

MCCB 630AF Page 23



Features

- Arc-Extinguish Unit
- Applied SAPO which is our patent (SAPO : Self Arc - Pushing Out Function)
- Easy to make space by minimize 210×275×103(600AF size to 140×257×103(400AF size)
- As same size as MCCB and ELCB and embedded ZCT
- Maximizing control convenience by using accessory cartridge

Home Panel Board Page 11



Feature

- Optimal for house branch circuit.
- Wide range for choice according to the diversification of rated current
- Excellent breaking performance by embedding the solenoid of current-limit structure (6kA at 220V)

MOLDED CASE CIRCUIT BREAKERS(MCCB) ECONOMIC TYPE



Frame Size(AF)		30AF			50AF			60AF			100AF			
Model		DB32Cb	DB33Cb	DB52Cb	DB53Cb	DB54Cb	DB62Cb	DB63Cb	DB64Cb	DB102Cb	DB103Cb	DB104Cb		
Number of Poles		2	3	2	3	4	2	3	4	2	3	4		
ZCT Built-In					○			○			○			
Rating	Rated Current A	(5,10)(Note1) 15, 20, 30			(5,10)15, 20, 30, 40, 50			15, 20, 30, 40, 50, 60			15, 20, 30, 40, 50, 60, 75, 100			
	Rated Voltage AC(V)	460			600			600			600			
	DC(V)	125			250		-		250		-		250	
	Rated Insulation Voltage V	460			690			690			690			
Ultimate Breaking AC	600V	-			5			5			7.5			
Capacity(kA)	480/500V	-			7.5			7.5			10			
KSC 8321(Sym)	460V	(2.5)5			(5)10			10			14			
ICE60947-2(Icu)	415V	5			10			10			14			
Ics=0.5Icu	380V	5			14			14			18			
	220V	(5)10			(10)25			25			25			
DC	250V	(5)10			5		-		5		-		7.5	
	125V	-			10		-		10		-		14	
Over Current Trip		Oil Dash Pot			Oil Dash Pot			Oil Dash Pot			Oil Dash Pot			
Accessories	Auxiliary switch AX	-			○			○			○			
	Alarm switch AL	-			○			○			○			
	Shunt trip SHT	-			○			○			○			
	Direct rotary handle DH	-			○			○			○			
	Terminal shield	-			○			○			○			
	Insulation barrier	-			○			○			○			
External Dimensions(mm)	a	50	75	50	75	100	50	75	100	50	75	100		
	b	96			130			130			130			
	c	60			60			60			60			
	d	80			80			80			80			
Certificates Obtained		KS, CE			KS, CE			KS, CE			KS, CE			

MOLDED CASE CIRCUIT BREAKERS(MCCB) STANDARD TYPE



Frame Size(AF)		30AF			50AF			60AF			100AF		
Model		DB32Sb	DB33Sb	DB34Sb	DB52Sb	DB53Sb	DB54Sb	DB62Sb	DB63Sb	DB64Sb	DB102Sb	DB103Sb	DB104Sb
Number of Poles		2	3	4	2	3	4	2	3	4	2	3	4
ZCT Built-In		○			○			○			○		
Rating	Rated Current A	5, 10, 15, 20, 30			15, 20, 30, 40, 50			15, 20, 30, 40, 50, 60			15, 20, 30, 40, 50, 60, 75, 100		
	Rated Voltage AC(V)	600			600			600			600		
	DC(V)	250		-		250		-		250		-	
	Rated Insulation Voltage V	690			690			690			690		
Ultimate Breaking AC	600V	5			7.5			7.5			10		
Capacity(kA)	480/500V	7.5			10			10			14		
KSC 8321(Sym)	460V	10			14			14			25		
ICE60947-2(Icu)	415V	10			14			14			25		
Ics=0.5Icu	380V	14			18			18			25		
	220V	25			25			25			50		
DC	250V	5		-		7.5		-		7.5		14	
	125V	10		-		14		-		14		20	
Over Current Trip		Oil Dash Pot			Oil Dash Pot			Oil Dash Pot			Thermal Magnetic		
Accessories	Auxiliary switch AX	○			○			○			○		
	Alarm switch AL	○			○			○			○		
	Shunt trip SHT	○			○			○			○		
	Direct rotary handle DH	○			○			○			○		
	Terminal shield	○			○			○			○		
	Insulation barrier	○			○			○			○		
External Dimensions(mm)	a	50	75	100	50	75	100	50	75	100	60	90	120
	b	130			130			130			155		
	c	60			60			60			60		
	d	80			80			80			80		
Certificates Obtained		KS, CE			KS, CE			KS, CE			KS	KS, CE	



225AF			400AF			600AF			630AF			800AF		
DB202Cb	DB203Cb	DB204Cb	DB402C	DB403C	DB404C	DB602C	DB603C	DB604C	DB632C	DB633C	DB634C	DB802C	DB803C	DB804C
2	3	4	2	3	4	2	3	4	2	3	4	2	3	4
○			○											
125, 150, 175, 200, 225			250, 300, 350, 400			500, 600			500, 600, 630			700, 800		
600			600			600			600			600		
250		-	250		-	250		-	250		-	250		
690			690			690			690			690		
7.5			18			22			22			22		
10			22			25			25			25		
18			30			35			35			35		
18			30			42			42			42		
35			42			50			50			50		
10		-	10		-	20		-	20		-	20		-
15		-	20		-	30		-	30		-	30		-
Thermal Magnetic			Thermal Magnetic			Thermal Magnetic			Thermal Magnetic			Thermal Magnetic		
○			○			○			○			○		
○			○			○			○			○		
○			○			○			○			○		
○			-			-			-			-		
○			○			-			-			-		
○			○			○			○			○		
105		140	140		184	210		280	140		184	210		280
165			257			275			257			275		
60			103			103			103			103		
82.5			133			149			154			149		
KS	KS, CE		KS	KS(350,400A Except),CE		KS	KS, CE		KS	KS, CE		KS	KS, CE	



225AF			400AF			600AF			630AF			800F		
DB202Sb	DB203Sb	DB204Sb	DB402S	DB403S	DB404S	DB602S	DB603S	DB604S	DB632S	DB633S	DB634S	DB802S	DB803S	DB804S
2	3	4	2	3	4	2	3	4	2	3	4	2	3	4
○			○											
100, 125, 150, 175, 200, 225			250, 300, 350, 400			500, 600			500, 600, 630			700, 800		
600			600			600			600			600		
250		-	250			250		-	250		-	250		-
690			690			690			690			690		
10			22			25			25			25		
14			25			45			45			45		
25			35			50			50			50		
25			42			65			65			65		
50			50			100			100			100		
14		-	20		-	40		-	40		-	40		-
20		-	30		-	50		-	50		-	50		-
Thermal Magnetic			Thermal Magnetic			Thermal Magnetic			Thermal Magnetic			Thermal Magnetic		
○			○			○			○			○		
○			○			○			○			○		
○			○			○			○			○		
○			-			-			-			-		
○			○			-			-			-		
○			○			○			○			○		
105		140	140		184	210		280	140		184	210		280
165			257			275			257			275		
60			103			103			103			103		
82.5			133			149			154			149		
KS	KS, CE		KS	KS, CE		KS	KS, CE		KS	KS, CE		KS	KS, CE	

※ Please write "ZCT" by the side of product name when you order ZCT internal type.(ex:DB104CB-ZCT)

MOLDED CASE CIRCUIT BREAKERS(MCCB) HIGH INTERRUPTING CAPACITY TYPE



Frame Size(AF)		30AF			50AF		
Model		DB32Hb	DB33Hb	DB34Hb	DB52Hb	DB53Hb	DB54Hb
Number of Poles		2	3	4	2	3	4
ZCT Built-In			○			○	
Rating	Rated Current	A 15, 20, 30			15, 20, 30, 40, 50		
	Rated Voltage	AC(V) 600			600		
	DC(V)	250		-	250		-
	Rated Insulation Voltage	V 690			690		
Ultimate Breaking Capacity(kA)	AC	600V	7.5		10		
KS C 8321(Sym)		480/500V	10		14		
ICE60947-2(Icu)		460V	14		25		
Ics=0.5Icu		415V	14		25		
		380V	18		25		
		220V	25		50		
DC	250V	7.5		-	14		-
	125V	14		-	20		-
Over Current Trip		Oil Dash Pot			Thermal Magnetic		
Accessories	Auxiliary switch	AX	○		○		
	Alarm switch	AL	○		○		
	Shunt trip	SHT	○		○		
	Direct rotary handle	DH	○		○		
	Terminal shield		○		○		
	Insulation barrier		○		○		
External Dimensions(mm)	a	50	75	100	60	90	120
	b		130			155	
	c		60			60	
	d		80			80	
Certificates Obtained		KS, CE			KS, CE		

MOLDED CASE CIRCUIT BREAKERS(MCCB) CURRENT LIMITING TYPE



Frame Size(AF)		50AF		100AF		225AF	
Model		DB53L	DB54L	DB103L	DB104L	DB203L	DB204L
Number of Poles		3	4	3	4	3	4
ZCT Built-In			○		○		○
Rating	Rated Current	A 20, 30, 40, 50		20, 30, 40, 50, 60, 75, 100		125, 150, 175, 200, 225	
	Rated Voltage	AC(V) 600		600		600	
	DC(V)	250	-	250	-	250	-
	Rated Insulation Voltage	V 690		690		690	
Ultimate Breaking Capacity(kA)	AC	600V	30	35		35	
KS C 8321(Sym)		480/500V	35	50		50	
ICE60947-2(Icu)		460V	42	65		65	
Ics=0.5Icu		415V	42	65		65	
		380V	42	65		65	
		220V	85	125		125	
DC	250V	40	-	40	-	40	-
	125V	60	-	60	-	60	-
Over Current Trip		Thermal Magnetic		Thermal Magnetic		Thermal Magnetic	
Accessories	Auxiliary switch	AX	-	-		-	
	Alarm switch	AL	-	-		-	
	Shunt trip	SHT	-	-		-	
	Direct rotary handle	DH	-	-		-	
	Terminal shield		-	-		-	
	Insulation barrier		○	○		○	
External Dimensions(mm)	a	105	140	105	140	105	140
	b		165		165		165
	c		78.9		78.9		78.9
	d		109		109		109
Certificates Obtained		Safety Certificate		Safety Certificate		Safety Certificate	



100AF			225AF			400AF		
DB102Hb	DB103Hb	DB104Hb	DB202Hb	DB203Hb	DB204Hb	DB402H	DB403H	DB404H
2	3	4	2	3	4	2	3	4
○			○			○		
15, 20, 30, 40, 50, 60, 75, 100			100, 125, 150, 175, 200, 225			250, 300, 350, 400		
600			600			600		
250	-		250	-		250	-	
690			690			690		
18			18			25		
25			25			35		
35			35			50		
35			35			65		
65			65			85		
18	-		18	-		40	-	
25	-		25	-		50	-	
Thermal Magnetic			Thermal Magnetic			Thermal Magnetic		
○			○			○		
○			○			○		
○			○			-		
○			○			○		
○			○			○		
60	90	120	105	140		140	184	
155			165			257		
60			60			95		
80			82.5			154		
KS, CE			KS			KS	KS, CE	



400AF		600AF		630AF		800AF		
DB403L	DB404L	DB603L	DB604L	DB633L	DB634L	DB802L	DB803L	DB804L
3	4	3	4	3	4	2	3	4
○		○		○		○		
250, 300, 350, 400		500, 600		500, 600, 630		700, 800		
600		600		600		600		
250	-	250	-	250	-	250	-	
690		690		690		690		
35		30		30		30		
50		65		65		65		
65		85		85		85		
65		100		100		100		
125		125		125		125		
40	-	40	-	40	-	40	-	
60	-	60	-	60	-	660	-	
Thermal Magnetic		Thermal Magnetic		Thermal Magnetic		Thermal Magnetic		
○		○		○		○		
○		○		○		○		
○		○		○		○		
-		-		-		-		
○		-		-		-		
○		○		○		○		
140	184	210	280	140	184	210	280	
257		275		257		275		
103		103		103		103		
133		149		154		149		
KS, CE		-		-		-		

※ Please write "ZCT" by the side of product name when you order ZCT internal type.(ex:DB104CB-ZCT)

EARTH LEAKAGE CIRCUIT BREAKERS(ELCB)ECONOMIC TYPE



Frame Size(AF)		50AF			60AF	100AF			225AF			400AF
Model		DBE52Cb	DBE53Cb	DBE54Cb	DBE63Cb	DBE102Cb	DBE103Cb	DBE104Cb	DBE202Cb	DBE203Cb	DBE204Cb	DBE403C
Number of Poles		2P2E	3P3E	4P3E	3P3E	3P2E	3P3E	4P3E	3P2E	3P3E	4P3E	3P3E
Rating	Protective Function	For Both Overload and Short Circuit Protection			For Both Overload and Short Circuit Protection	For Both Overload and Short Circuit Protection			For Both Overload and Short Circuit Protection			For Both Overload and Short Circuit Protection
	Rated Voltage AC(V)	220	460		460	220	460		460			460
	Rated Impulse Voltage [kV]	6			6	6			6			6
	Rated Current [A]	15, 20, 30, 40, 50			60	15, 20, 30, 40, 50, 60, 75, 100			100, 125, 150, 175, 200, 225			250, 300, 350, 400
	Rated Sensitivity Current [mA]	30, 100/200/500			30, 100/200/500	100/200/500			100/200/500			200/500
	Tripping Time [sec]	Within 0.1 Second			Within 0.1 Second	Within 0.1 Second			Within 0.1 Second			Within 0.1 Second
Ultimate Breaking Capacity Icu AC	460/415V	10		10	14		18			30		
KSC 4613(Sym) Ics=0.5Icu	240/220V	25		25	25		35			42		
Over Current Trip		Oil Dash Pot			Oil Dash Pot	Oil Dash Pot			Thermal Magnetic			Thermal Magnetic
Accessories	Auxiliary switch AX	○			○	○			○			○
	Alarm switch AL	○			○	○			○			○
	Direct rotary handle DH	○			○	○			○			-
	Terminal shield	○			○	○			○			-
	Insulation barrier	○			○	○			○			○
External Dimensions(mm)	a	75		100	75	75		100	105		140	140
	b	130			130	130			165			345
	c	60			60	60			60			103
	d	80			80	80			82.5			133
Certificates Obtained		KS, CE			KS, CE	KS, CE			KS, CE			KS(350, 400 Except)

EARTH LEAKAGE CIRCUIT BREAKERS (ELCB)STANDARD TYPE



Frame Size(AF)		30AF	50AF		60AF	100AF			225AF			400AF	
Model		DBE33Sb	DBE52Sb	DBE53Sb	DBE54Sb	DBE63Sb	DBE102Sb	DBE103Sb	DBE104Sb	DBE202Sb	DBE203Sb	DBE204Sb	DBE403S
Number of Poles		3P3E	2P2E	3P3E	4P3E	3P3E	3P2E	3P3E	4P4E	3P2E	3P3E	4P3E	3P3E
Rating	Protective Function	For Both Overload and Short Circuit Protection	For Both Overload and Short Circuit Protection			For Both Overload and Short Circuit Protection	For Both Overload and Short Circuit Protection			For Both Overload and Short Circuit Protection			For Both Overload and Short Circuit Protection
	Rated Voltage AC(V)	460	220	460		460	220	460		460			460
	Rated Impulse Voltage [kV]	6	6			6	6			6			6
	Rated Current [A]	10, 15, 20, 30	15, 20, 30, 40, 50			60	15, 20, 30, 40, 50, 60, 75, 100			100, 125, 150, 175, 200, 225			250, 300, 350, 400
	Rated Sensitivity Current [mA]	30, 100/200/500	30, 100/200/500			30, 100/200/500	100/200/500			100/200/500			200/500
	Tripping Time [sec]	Within 0.1 Second	Within 0.1 Second			Within 0.1 Second	Within 0.1 Second			Within 0.1 Second			Within 0.1 Second
Ultimate Breaking Capacity Icu AC	460/415V	10	14		14	25		25			35		
KSC 4613(Sym) Ics=0.5Icu	240/220V	25	25		25	50		50			50		
Over Current Trip		Oil Dash Pot	Oil Dash Pot			Oil Dash Pot	Thermal Magnetic			Thermal Magnetic			Thermal Magnetic
Accessories	Auxiliary switch AX	○	○		○	○			○			○	
	Alarm switch AL	○	○		○	○			○			○	
	Direct rotary handle DH	○	○		○	○			○			○	
	Terminal shield	○	○		○	○			○			-	
	Insulation barrier	○	○		○	○			○			○	
External Dimensions(mm)	a	75	75		100	75	90		120	105		140	140
	b	130			130	130	155			165			345
	c	60			60	60	60			60			103
	d	80			80	80	80			82.5			133
Certificates Obtained		KS, CE	KS, CE		KS, CE	KS			KS			KS(350, 400 Except)	



EARTH LEAKAGE CIRCUIT BREAKERS (ELCB) HIGH INTERRUPTING CAPACITY TYPE



Frame Size(AF)		30AF	50AF		100AF			225AF			400AF	
Model		DBE33Hb	DBE52Hb	DBE53Hb	DBE54Hb	DBE102Hb	DBE103Hb	DBE104Hb	DBE202Hb	DBE203Hb	DBE204Hb	DBE403H
Number of Poles		3P3E	3P2E	3P3E	4P3E	3P2E	3P3E	4P3E	3P2E	3P3E	4P3E	3P3E
Rating	Protective Function	For Both Overload and Short Circuit Protection		For Both Overload and Short Circuit Protection			For Both Overload and Short Circuit Protection			For Both Overload and Short Circuit Protection		For Both Overload and Short Circuit Protection
	Rated Voltage AC(V)	460	220	460		220	460		460		460	
	Rated Impulse Voltage [kV]	6	6			6			6		6	
	Rated Current [A]	15, 20, 30	15, 20, 30, 40, 50			15, 20, 30, 40, 50, 60, 75, 100			100, 125, 150, 175, 200, 225		250, 300, 350, 400	
	Rated Sensitivity Current [mA]	30, 100/200/500	100/200/500			100/200/500			100/200/500		200/500	
	Tripping Time [sec]	Within 0.1 Second	Within 0.1 Second			Within 0.1 Second			Within 0.1 Second		Within 0.1 Second	
Ultimate Breaking Capacity Icu AC	460/415V	14	25		35			35		50		
KSC 4613(Sym) Ics=0.5Icu	240/220V	25	50		65			65		85		
Over Current Trip		Oil Dash Pot	Thermal Magnetic			Thermal Magnetic			Thermal Magnetic		Thermal Magnetic	
Accessories	Auxiliary switch AX	○	○			○			○		○	
	Alarm switch AL	○	○			○			○		○	
	Direct rotary handle DH	○	○			○			○		-	
	Terminal shield	○	○			○			○		-	
	Insulation barrier	○	○			○			○		○	
External Dimensions(mm)	a	75	90		120	90	120		105	140		140
	b	130	155			155			165		345	
	c	60	60			60			60		103	
	d	80	80			80			82.5		133	
Certificates Obtained		KS	KS	KS, CE		KS			KS		KS(350, 400 Except)	

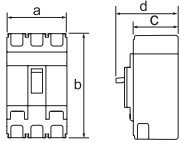


04 → → BREAKERS FOR DISTRIBUTION BOARD

BREAKERS FOR DISTRIBUTION BOARD(MCCB) WIRING BREAKERS



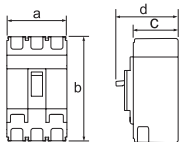
SERIES		DBH Series			DSB Series								
Frame Size(AF)		30AF			30AF			30AF			30AF		
Model		DBH32b	DBH32bL	DBH32C	DSB32b	DSB32s	DSB32h	DSB33b	DSB33s	DSB33h	DSB34b	DSB34s	DSB34h
Number of Poles & Element		2P2E			2P2E			3P3E			4P3E		
Rating	Rated Current A	15, 20, 30		20, 30	15, 20, 30								
	Rated Voltage AC(V)	220			220			460					
Ultimate Breaking Capacity	AC 460V	-			-			1.5	2.5	5	1.5	2.5	5
	220V	2.5			2.5	5	10	2.5	5	10	-		
External Dimensions(mm)	a	32			35			54			73.5		
	b	70		82	80			80			80		
	c	42	38	38	60			60			60		
	d	56			76			76			76		
Certificates Obtained		KS, CE			KS, CE			KS, CE			KS, CE		



BREAKERS FOR DISTRIBUTION BOARD(ELCB) ELECTRIC LEAKAGE BREAKERS



SERIES		DEH Series			DSE Series								
Frame Size(AF)		30AF			30AF			30AF			30AF		
Model		DEH32AL	DEH32Ab	DEH32b	DSE32b	DSE32s	DSE32h	DSE33b	DSE33s	DSE33h	DSE34b	DSE34s	DSE34h
Number of Poles & Element		2P2E			2P2E			3P3E			4P3E		
Rating	Rated Current A	15, 20, 30			15, 20, 30								
	Rated Voltage AC(V)	220			220			460					
	Rated Sensitivity Current mA	15, 30			15, 30			30, 100/200/500			30, 100/200/500		
	Rated Non-Tripping Current mA	7.5, 15			7.5, 15			15, 50/100/250			15, 50/100/250		
	Operating Time sec	Within 0.03 Second			Within 0.03 Second			Within 0.1 Second			Within 0.1 Second		
Ultimate Breaking Capacity	AC 460V	-			-			1.5	2.5	5	1.5	2.5	5
	220V	2.5			2.5	5	10	-			-		
External Dimensions(mm)	a	32		62	35			54			73.5		
	b	70		82	80			80			80		
	c	38	42	40.5	60			60			60		
	d	56		56	76			76			76		
Acquisitive standard		KS, CE			KS, CE			KS, CE			KS, CE		





									DB-F Series					
50AF			50AF			30AF			50AF		100AF			
DSE52b	DSB52s	DSB52h	DSB53b	DSB53s	DSB53h	DSB54b	DSB54s	DSB54h	DB32F	DB33F	DB52F	DB53F	DB102F	DB103F
2P2E		3P3E			4P3E			2P2E	3P3E	2P2E	3P3E	2P2E	3P3E	
15, 20, 30, 40, 50						(5,10), 15, 20, 30			15, 20, 30, 40, 50		60, 75, 100			
220		460			460			460		460		460		
-		1.5	2.5	5	1.5	2.5	5	-		(2.5)5	5		5	
2.5	5	10	2.5	5	10	-			(5)10	10	10		10	
35		54			73.5			50	75	50	75	50	75	
80		80			80			96		96		96		
60		60			60			60		60		60		
76		76			76			80		80		80		
KS, CE		KS, CE			KS, CE			KS, CE		KS, CE		KS, CE		



									DBE-F Series					
50AF			50AF			30AF			50AF		100AF			
DSE52b	DSE52s	DSE52h	DSE53b	DSE53s	DSE53h	DSE54b	DSE54s	DSE54h	DBE32Fb	DBE33F	DBE52Fb	DBE53F	DBE102Fb	DBE103F
2P2E		3P3E			4P3E			2P2E	3P3E	2P2E	3P3E	2P2E	3P3E	
15, 20, 30, 40, 50						15, 20, 30			15, 20, 30, 40, 50		60, 75, 100			
220		460			460			220	460	220	460	220	460	
15, 30		30, 100/200/500			30, 100/200/500			15, 30		15, 30		30		
7.5, 15		15, 50/100/250			15, 50/100/250			7.5, 15		7.5, 15		15		
Within 0.03 Second		Within 0.1 Second			Within 0.1 Second			Within 0.03 Second	Within 0.1 Second	Within 0.03 Second	Within 0.1 Second	Within 0.03 Second	Within 0.1 Second	
-		1.5	2.5	5	1.5	2.5	5	-		5	-		5	
2.5	5	10	-			-			10	10	10	10	10	10
35		54			73.5			50	75	50	75	50	75	
80		80			80			96		96		96		
60		60			60			60		60		60		
76		76			76			80		80		80		
KS, CE		KS, CE			KS, CE			KS, CE	KS, CE	KS, CE	KS, CE	KS, CE	KS, CE	

※ Please write "L" behind of the model name when order "Lug" type among the DSB(E) Series

05 → → BK6 □ Mini Circuit Breaker

Application

BK6□ series mini circuit breaker can be used to the circuit of AC 50Hz, 230V in single pole, 400V in double, three, four poles for protecting overload and short circuit. Meanwhile, they are also used in turning on or off the electric apparatus and lighting circuit under the normal condition.

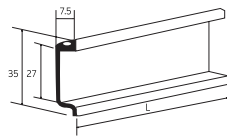
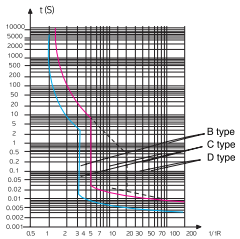
The product conforms to IEC898.



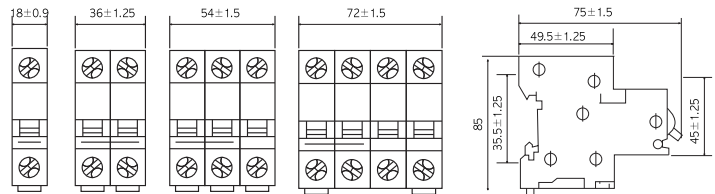
Specifications

Frame Size(AF)	BK61/BK3-61	BK62/BK3-62	BK63/BK3-63	BK64/BK3-64
No. of Pole	1	2	3	4
Rated Voltage	230V/400V			
Electronical Life	4000 times / 8000 times			
Mechanical Life	10000 times / 20000 times			
Rated Current	1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63A			
Ingress Protection	IP20			
Breaking Capacity	6kA / 10kA			

Characteristic Curve



Dimensions



06 → → HOME PANEL BOARD

HOME PANEL BOARD



Feature

- Optimal for house branch circuit.
- Wide range for choice according to the diversification of rated current
- Excellent breaking performance by embedding the solenoid of current-limit structure (6kA at 220V)

Functions

- Overload protection
- Short circuit protection
- Isolation
- Controlling
- Used in residential building, non-residential building, industry, energy and infrastructure.

Technical specifications

- Standard: IEC60947-2
- Rated current I_n (A): 80, 100, 125
- Rated voltage U_n (V AC): 230/400
- Operational voltage (V AC) : Min:24; Max:250/440
- Number of poles: 1, 2, 3, 4
- Trip characteristic: C
- Characteristic curve C (I_n): 8
- Thermal operating limit (I_n): (1.05-1.3)
- Degree of protection: IP20, with connected conductors
- Electrical life (times): 4,000
- Mechanical life (times): 10,000
- Breaking Capacity:

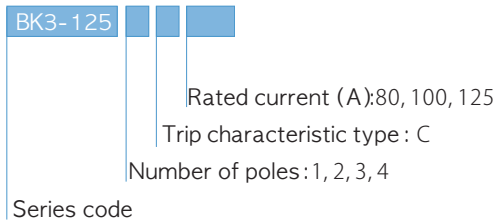
Model	Rated voltage (V)		Acc.to IEC60947-2	
			I_{cu} (kA)	I_{cs} (kA)
BK3 - 125	1P	230/400	10	7.5
	2-4P	400	10	7.5

- Fire resistance according to UL 94: V0
- Mounting position: Any
- Conductor cross-sections
- Solid and stranded (mm^2): 0.75-35
- Finely stranded with end sleeve (mm^2): 0.75-25
- Terminal tightening torque (N·m): 2.8
- Ambient temperature ($^{\circ}C$): -25 ~ +45, max. 95 % humidity
- Storage temperature ($^{\circ}C$): -40 ~ +75
- Altitude Max (meters): 2,000

References

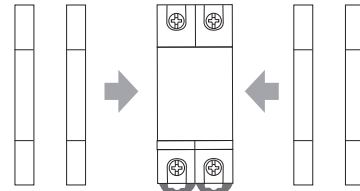


Instruction of type code



Add-on devices

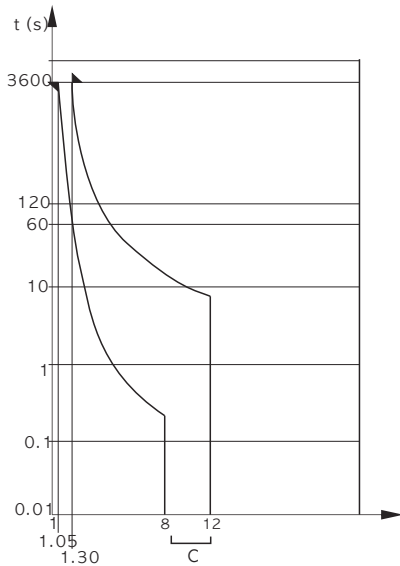
Auxiliaries:



Features

- Rated current up to 125A
The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF)
- The handle provides a clear indication of the contact position
- Adequate printing of all data on the front provides long-term identification
- Energy limiting class: 3
- The emission of ionized gases is limited to the severest restrictions: 45 mm grid distance

Tripping curve



Magnetic release

- An electromagnet with plunger ensures instantaneous tripping in case of short circuit.
- The standard leaves the calibration of magnetic release to manufacturer's decision.
- Sassin MCB series BK3 - 125 offers instantaneous tripping ranges
release C: 8 In
release D: 12 In

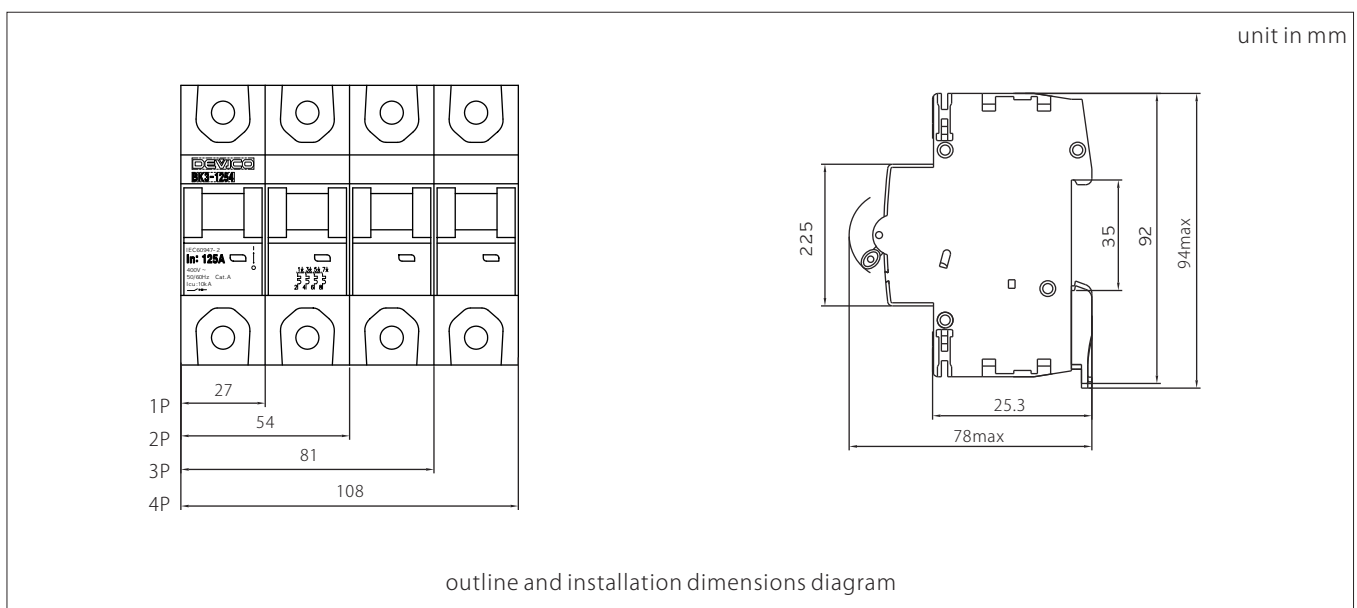
Thermal release

- The release is initiated by a bimetal strip in case of overload.
- The standard defines the range of release for two specific overload values.
- Reference ambient temperature is 30 °C for BK3 - 125

Test current	Tripping time
1.05 In	$t \geq 2 \text{ h (In} > 63\text{A)}$
1.30 In	$t < 2 \text{ h (In} > 63\text{A)}$

Outline and installation dimensions

BK3 - 125 is installed on DIN rail terminal and can be connected with wire of less than 25mm²



Standard Model List



M O D E L			DM50C	DM65C	
Rating KS C 4504	3-Phase Cage Motor	AC3	200-220V	11kW 50A	15kW 65A
			380-440V	22kW 48A	30kW 65A
			500-550V	22kW 38A	37kW 60A
		AC4	200-220V	7.5kW 35A	11kW 50A
			380-440V	15kW 32A	22kW 47A
	Single Phase Motor		110V	-	-
			220V	-	-
	Resistance Load (DC1)	2-Pole Serial	110V	35A	35A
			220V	15A	15A
		3-Pole Serial	110V	50A	65A
220V			40A	50A	
Durability (10,000 Times)		Electrical	200	200	
		Mechanical	1200	1200	
External Operation Handle(Surface Type)			2a2b	2a2b	
Auxiliary Contact	Side-on		DAU2Sb	DAU2Sb	
Installation Method			For both screw and rail installations		
External Dimensions(mm) (W×H×D)			79×109×119.5		
Installation Dimensions(mm) (Width×Length)			41~47×92~100		
Applied Model	Contactor	Reversible Type	-	-	
		Standard	-	-	
	Switch	Reversible Type	-	-	
		Enclosed Type	-	-	
Thermal Overload Relay		Standard	DTH85 ^(NOTE 1)		
		Independent Type	-		



M O D E L			DM75C	DM85C	DM100C	
Rating KS C 4504	3-Phase Cage Motor	AC3	200-220V	18.5kW 75A	19kW 80A	25kW 100A
			380-440V	37kW 75A	37kW 80A	50kW 100A
			500-550V	37kW 64A	45kW 75A	55kW 80A
		AC4	200-220V	13kW 55A	15kW 65A	19kW 80A
			380-440V	25kW 52A	30kW 62A	37kW 75A
	Single Phase Motor		110V	-	-	-
			220V	-	-	-
	Resistance Load (DC1)	2-Pole Serial	110V	50A	50A	80A
			220V	20A	20A	50A
		3-Pole Serial	110V	70A	80A	100A
220V			55A	60A	80A	
Durability (10,000 Times)		Electrical	200	200	200	
		Mechanical	1200	1200	1200	
External Operation Handle(Surface Type)			2a2b	2a2b	2a2b	
Auxiliary Contact	Side-on		DAU2Sb	DAU2Sb	DAU2Sb	
Installation Method			For both screw and rail installations			
External Dimensions(mm) (W×H×D)			94×140.5×134.4			
Installation Dimensions(mm) (Width×Length)			55~60×130			
Applied Model	Contactor	Reversible Type	-	-	-	
		Standard	-	-	-	
	Switch	Reversible Type	-	-	-	
		Enclosed Type	-	-	-	
Thermal Overload Relay		Standard	DTH85 ^(NOTE 1)			
		Independent Type	-			

NOTE 1) DTH85 is singleness type and using for alternation.

 **Standard Model List**



M O D E L			DMC9b	DMC12b	DMC18b	
Rating KS C 4504	3-Phase Cage Motor	AC3	200-220V	2.2kW 11A	2.7kW 13A	3.7kW 18A
			380-440V	2.7kW 7A	4kW 9A	5.5kW 13A
			500-550V	2.7kW 7A	5.5kW 9A	5.5kW 13A
		AC4	200-220V	1.5kW 8A	2.2kW 11A	3.7kW 18A
			380-440V	2.2kW 6A	4kW 9A	4kW 9A
			110V	0.4kW 11A	0.5kW 13A	0.75kW 18A
	Single Phade Motor	220V	0.8kW 11A	1kW 13A	1.5kW 18A	
		Resistance Load (DC1)	2-Pole Serial	110V	6A	10A
	220V			3A	7A	8A
	3-Pole Serial		110V	8A	12A	18A
220V			8A	12A	18A	
Continuous Current AC 1(lth)			25A	25A	40A	
Durability (10,000 Times)			Electrical	250	250	250
			Mechanical	2500	2500	2500
External Operation Handle(Surface Type)			1a1b	1a1b	1a1b	
Auxiliary Contact	Side-on		DAU2Sb			
	Head-on		DAU2b, DAU4b			
Installation Method			For both screw and rail installations			
External Dimensions(mm) (W×H×D)			44×80×86.7			
Installation Dimensions(mm) (Width×Length)			30~35×48~60 / 35×60			
Applied Model	Contactor	DC Operation Type	DMD9b	DMD12b	DMD18b	
		Reversible Type	DMC9b-R	DMC12b-R	DMC18b-R	
	Switch	Open Type	DMS9b	DMS12b	DMS18b	
		Reversible Type	DMS9b-R	DMS12b-R	DMS18b-R	
		Enclosed Type	DMW9b	DMW12b	DMW18b	
		Standard	DTH22b			
Thermal Overload Relay		Independent Type	DTZ22b			



M O D E L			DMC50	DMC65	DMC75	DMC85	
Rating KS C 4504	3-Phase Cage Motor	AC3	200-220V	11kW 50A	15kW 64A	18.5kW 75A	19kW 80A
			380-440V	22kW 48A	30kW 65A	37kW 75A	37kW 80A
			500-550V	22kW 38A	37kW 60A	37kW 64A	45kW 75A
		AC4	200-220V	7.5kW 35A	11kW 50A	13kW 55A	15kW 65A
			380-440V	15kW 32A	22kW 47A	25kW 52A	30kW 62A
			110V	-	-	-	-
	Single Phade Motor	220V	-	-	-	-	
		Resistance Load (DC1)	2-Pole Serial	110V	35A	50A	50A
	220V			15A	20A	20A	50A
	3-Pole Serial		110V	50A	70A	80A	100A
220V			40A	55A	60A	80A	
Continuous Current AC 1(lth)			80A	110A	135A	150A	
Durability (10,000 Times)			Electrical	150	150	150	100
			Mechanical	1000	1000	1000	500
External Operation Handle(Surface Type)			2a2b	2a2b	2a2b	2a2b	
Auxiliary Contact	Side-on		DAU2Sb				
	Head-on		DAU2b, DAU4b				
Installation Method			For both screw and rail installations				
External Dimensions(mm) (W×H×D)			94×120×115.7				
Installation Dimensions(mm) (Width×Length)			50~60×100 / 60×95				
Applied Model	Contactor	DC Operation Type	-	-	-	-	
		Reversible Type	DMC50-R	DMC65-R	DMC75-R	DMC85-R	
	Switch	Open Type	DMS50	DMS65	DMS75	DMS85	
		Reversible Type	DMC50-R	DMS65-R	DMS75-R	DMS85-R	
		Enclosed Type	DMS50	DMW65	DMW75	DMW85	
		Standard	DTH85 (NOTE 1)				

NOTE 1) DTH85 is single type and using for alternation.

NOTE 2)HRD 150, 180, DTH220 standard model is produced as single type.



DMC22b	DMC32b	DMC40b	DMC48b
4kW 20A	5.5kW 26A	7.5kW 35A	11kW 48A
7.5kW 20A	11kW 25A	15kW 32A	15kW 35A
5.5kW 17A	11kW 20A	15kW 25A	15kW 28A
3.7kW 18A	4.5kW 20A	5.5kW 25A	7.5kW 30A
5.5kW 13A	7.5kW 17A	11kW 24A	11kW 28A
0.9kW 20A	1.2kW 26A	1.7kW 35A	-
1.8kW 20A	-	-	-
15A	25A	25A	35A
12A	12A	12A	15A
20A	25A	35A	50A
20A	22A	30A	40A
40A	50A	60A	70A
250	200	200	200
2500	1500	1500	1500
1a1b	2a2b	2a2b	2a2b
DAU2Sb			
DAU2b, DAU4b			
For both screw and rail installations			
68×82×94.4			
30~35×48~60 / 35×60			
DMD22b	DMD32b	DMD40b	DMD48b
DMC22b-R	DMC32b-R	DMC40b-R	DMC48b-R
DMS22b	DMS32b	DMS40b	DMS48b
DMS22b-R	DMS32b-R	DMS40b-R	DMS48b-R
DMW22b	DMW32b	DMW40b	DMW48b
DTH40			
DTZ40			



DMC100	DMC125	DMC150C	DMC150	DMC180	DMC220
25kW 100A	30kW 125A	37kW 150A	37kW 150A	45kW 180A	55kW 230A
50kW 100A	60kW 120A	75kW 150A	75kW 150A	90kW 180A	110kW 230A
55kW 80A	60kW 90A	90kW 140A	90kW 140A	110kW 180A	132kW 200A
19kW 80A	22kW 93A	30kW 125A	30kW 125A	37kW 150A	45kW 180A
37kW 75A	45kW 90A	55kW 110A	55kW 110A	75kW 150A	90kW 180A
-	-	-	-	-	-
-	-	-	-	-	-
80A	80A	100A	100A	150A	150A
50A	50A	100A	100A	150A	150A
100A	100A	150A	150A	180A	220A
80A	80A	150A	150A	180A	220A
150A	150A	180A	200A	230A	260A
100	100	100	100	100	100
500	500	500	500	500	500
2a2b	2a2b	2a2b	2a2b	2a2b	2a2b
For both screw and rail installations			For both screw and rail installations		
100×157.4×146.5			154×170×170		
80×100 / 90×125			120×120		
-	-	-	-	-	-
-	-	-	-	-	-
DMS100	DMS125	DMS150C	DMS150	DMS180	DMS220
-	-	-	-	-	-
-	-	-	-	-	-
HRD150 (NOTE 2)		HRD180 (NOTE 2)		DTH220 (NOTE 2)	

10 → → THERMAL OVERLOAD RELAYS

Model and Rating



Division	Model	DTH22b			DTH40			DTH85			HRD150			HRD180			DTH220				
	Nominal Rating	Adjustment Range			Adjustment Range			Adjustment Range			Adjustment Range			Adjustment Range			Adjustment Range				
		Minimum	Medium	Maximum	Minimum	Medium	Maximum	Minimum	Medium	Maximum	Minimum	Medium	Maximum	Minimum	Medium	Maximum	Minimum	Medium	Maximum		
Rated Current(A)	0,52	0,4	0,52	0,63																	
	0,82	0,63	0,82	1																	
	1,3	1	1,3	1,6																	
	2,1	1,6	2,1	2,5																	
	3,3	2,5	3,3	4																	
	5	4	5	6	4	5	6														
	6,5	5	6,5	8	5	6,5	8														
	7,5	6	7,5	9	6	7,5	9														
	8,5	7	8,5	10	7	8,5	10	7	8,5	10											
	11	9	11	13	9	11	13	9	11	13											
	15	12	15	18	12	15	18	12	15	18											
	19	16	19	22	16	19	22	16	19	22											
	22				18	22	26	18	22	26											
	30				24	30	36	24	30	36											
	34				28	34	40	28	34	40											
	42				34	42	50	34	42	50	34	42	50								
	55							45	55	65											
	56										45	56	67								
65							54	65	75												
67										54	67	80									
74							63	74	85												
80										65	80	95	65	80	95	65	80	95	65	80	100
110										90	110	130	90	110	130	85	107	125			
130										105	130	155	105	130	155	100	130	160			
155													125	155	185	120	150	180			
200																160	200	240			
Element Part	2-Element	Standard			Standard			Standard			Standard			Standard			Standard				
	3-Element	Semi-Standard			Semi-Standard			Semi-Standard			Semi-Standard			Semi-Standard			Semi-Standard				
Auxiliary Contact		1a1b			1a1b			1a1b			1c			1c			1a1b				
Return Type		For Both Manual/Automatic			For Both Manual/Automatic			For Both Manual/Automatic			For Both Manual			For Both Manual			For Both Manual/Automatic				
Power Consumption		1,8VA/Pole			2,0VA/Pole			3,5VA/Pole			2,3VA/Pole			2,3VA/Pole			2,3VA/Pole				
External Dimensions(WHD)		43 X 72 X 90,5			54 X 75,5 X 92			70 X 87 X 102,5			124 X 60 X 97			129 X 84 X 97			154 X 114 X 180				
Independent Installation Unit		DZ22b			DZ40			-			-			-			DTH220/3				
Applied Model	3-Element Type	DTH22b/3			DTH40/3			DTH85/3			HRD150/3			HRD180/3			DTK220				
	Phase Failure Protection	DTK22b			DTK40			DTK85			-			-			-				
	Independent Type	DTZ22b			DTZ40			-			-			-							
Possible Combinations for Electronic Contactor	DMC9b,12,12b,18b,22b			DMC32b,40b,48b			DMC50,65,75,85			DMC100,125,150C			DMC150,180			DMC220					
Electronic Contactor Combinations	DMC9b,12,12b,18b,22b			DMC32b,40b,48b			DMC50,65,75,85			DMC100,125,150C			DMC150,180			DMC220					

“DONG-A Electric...

Challenging with Innovation and Creativity!”

We promise to fulfill our role and duty to become the Dong' A Electric Device that develops evermore through participatory and transparent management by customers and all employees and staffs.

External Dimensions and Contact Form

Model	External Dimensions	Contact Form
DTH22b	<p> M3.5(OC)Auxiliary Terminal M3(ON)Terminal I M3.5(OC)Auxiliary Terminal I </p>	<p>Standard 2-Element</p> <p>Semi-Standard 3-Element</p>
DTH40	<p> M3.5(OC)Auxiliary Terminal M3(ON)Terminal I M3.5(OC)Auxiliary Terminal I </p>	<p>Standard 2-Element</p> <p>Semi-Standard 3-Element</p>
DTH85	<p> M3.5(OC)Auxiliary Terminal M3(ON)Terminal I M3.5(OC)Auxiliary Terminal I </p>	<p>Standard 2-Element</p> <p>Semi-Standard 3-Element</p>
HRD150	<p> M3(ON)Terminal I Holes for Mounting M4 </p>	<p>Standard 2-Element</p> <p>Semi-Standard 3-Element</p>
HRD180	<p> M3(ON)Terminal I Holes for Mounting M4 </p>	<p>Standard 2-Element</p> <p>Semi-Standard 3-Element</p>
DTH220	<p> M3(ON)Terminal I Holes for Mounting M4 </p>	<p>Standard 2-Element</p> <p>Semi-Standard 3-Element</p>

1 1 → → AUXILIARY RELAYS

Rating



M O D E L			DMC12	DAR(D)4b	DAR(D)6b	DAR(D)8b
Contact Form			4a(1a),3a1b(1b)	4a,3a1b,2a2b,1a3b,4b	6a,5a1b,4a2b,3a3b,2a4b	8a,7a1b,6a2b,5a3b,4a4b
Rated Insulation Voltage(Ui)			690V			
Conductive Current(AC1)			16A			
Alternating Current	Rating By Grade		AC15(11)(Coil Load)	AC15(11)(Coil Load)		AC12(13) (Resistance Load)
	Rated Current(A)	AC110V	6	6		10
		AC220V	3	3		8
		AC440V	1.5	1.5		5
		AC550V	1.2	1.2		5
	Closed Path, Braking Current(A)	AC110V	60	60		66
		AC220V	33	33		33
		AC440V	16.5	16.5		16.5
AC550V		13.2	13.2		13.2	
Direct Current Rating	Rating By Grade		DC13(11) (Coil Load)	DC13(11) (Coil Load)		DC12(14) (Resistance Load)
	Rated Current(A)	DC24V	3	3		5
		DC48V	1.5	1.5		3
		DC110V	1.1	1.1		2.5
		DC220V	0.55	0.55		1
	Closed Path, Braking Current(A)	DC24V	3.7	3.7		-
		DC48V	1.8	1.8		-
		DC110V	1.4	1.4		-
DC220V		0.7	0.7		-	
Number of Poles			4	4	6	6
Operating frequency(Number of operations/hour)			1800		1800	
Durability (10,000 Times)	AC15(11)	AC220V	50	50		
		AC440V	50	50		
	AC12(13)	AC220V	25	25		
		AC440V	25	25		
	DC13(11)	DC12~220V	50	50		
	DC12(14)					

1 2 → → CONTACTOR FOR ELECTRICAL SHOCK PREVENTION | Rating and Performance

Rating and Performance



M O D E L		DMP150	DMP250
Rated Conductive Current Ith (A)		300	500
Rated Conductive Current(A) AC110V/220V		150	250
Performance	Electrical	25 million uses	25 million uses
	Mechanical	250 million uses	250 million uses
Standard Coil Voltage(V)		110, 220, 380	
Contact Form	Major Contact	1Pole	1Pole
	Auxiliary Contact	2a2b	2a2b
Weight(kg)		1.15	1.15

Single Body Type



MODEL	Electronic Contactor	DMH10	DMH20
Rated Capacity(KW) (AC3,3-Phase Cage Moter)	AC200~220V	2.7	4
	AC380~440V	4	7.5
	AC500~550V	5.5	7.5
Rated Operational Current(A) (AC3,3-Phase Cage Moter)	AC200~220V	13	20
	AC380~440V	9	20
	AC500~550V	9	17
Rated Conductive Current(A) lth (A)		20	25

Type and Rated Capacity



Type	Head-on		Side-on
Model	DAU2b	DAU4b	DAU2Sb
Number of Poles	2	4	2
Contact Form	2a, 1a1b, 2b	4a, 3a1b, 2a2b, 1a3b, 4b	1a1b
Applied Model	DMC9b~85b	DMC9b~85b	DMC9b~DMC85



15 → → MAGNETIC CONTACTORS FOR MACHINE



Model and Rating


Model	DMC20A	DMC25A	DMC32A	DMC20C	DMC25C	DMC32C
Number of Poles	2	2	2	3	3	3
Rated Conductive Current(A)	30	40	50	30	40	50
Rated Operational Current(A)	AC220V	20	25	30	20	25
	AC440V	17	21	26	17	21
Ultimate Breaking Capacity(kW)	1 ϕ 110V	0.9	1.2	2.2	0.9	1.2
	1 ϕ 220V	1.8	2.2	5.5	1.8	2.2
	3 ϕ 220V	4	5.5	9.5	4	5.5
Standard Coil Voltage(VAC)	24~440			24~440		
Contact Form	2A			3A, 2A1b		
Weight(kg)	0.23			0.25		

16 → → SINGLE-PHASE ONLY MAGNETIC CONTACTORS

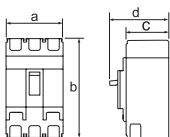


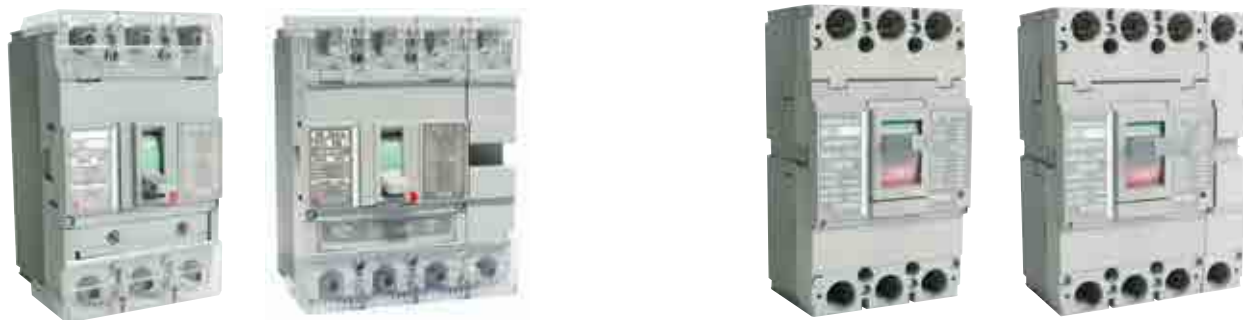
Rating and Performance

Model	DMC-10P2	DMC-20P2	DMC-25P2	DMC-30P2	DMC-35P2	DMC-40P2
	10A	20A	25A	30A	35A	40A
Number of Poles	2	2	2	2	2	2
Contact Form	2a	2a	2a	2a	2a	2a
Rated Insulation Voltage(V)	AC	690				
	DC	250				
Rated Operational Current(A)	200~220V	10	20	25	30	35
	380~440V	8	17	21	23	26
	500~550V	6	14	17	21	23
Rated Conductive Current(A)	20	30	35	40	45	50
External Dimensions	74×49×62					
Weight(kg)	0.19					



Frame size 1600AF

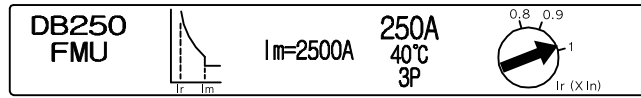
Model		DB1603Sa		
Number of poles		3		
Rated current I _n		1000, 1250, 1600		
Rated insulation voltage U _i		690V		
Rated operating voltage U _e		400V		
I _{cu} 400V/50HZ O-CO (KA) Rated ultimate short-circuit breaking capacity		65	85	100
I _{cs} 400V/50HZ O-CO-CO (KA) Rated service short-circuit breaking capacity (I _{cs} = 0.75I _{cu})		50	63.75	75
Rated Insulfion Voltage (V)		690		
U _{imp} (V) Rated impulse withstand voltage		8000		
Dielectric property (V)		3000		
Endurance	Total cycles	3000		
	Electrical endurance	500		
	Mechanical endurance	2500		
Ionization distance (mm)		≤80/0		
Over current trip unit	Thermal magnetic release	O		
Utilization category	Intelligent trip unit	O		
	Main circuit	B		
	Auxiliary circuit	AC-15		
Accessories	Auxiliary switch AX	○		
	Alarm switch AL	○		
	Shunt trip SHT	○		
	Direct rotary handle DH	○		
	Terminal shield	○		
	Insulation barrier	○		
External dimensions (mm)	W (a)	210		
	L (b)	406		
	H (c)	138.5		



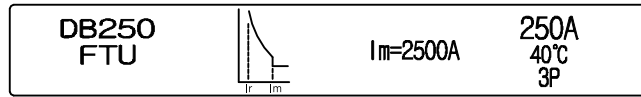


Frame Size(AF)			50AF		100F		250AF		630AF			
Model			DB53La	DB54La	DB103La	DB104La	DB203La	DB204La	DB632La	DB633La	DB634La	
Number of Poles			3	4	3	4	3	4	2	3	4	
ZCT Built-in			-		-		-		-			
Rating	Rated Current	A	15, 20, 30, 40, 50		60, 80, 100		125, 150, 160, 175, 200, 225, 250		400, 500, 600, 630			
	Rated Voltage	AC(V)	600		600		600		600			
		DC(V)	250		250		250		250			
	Rated Insulation Voltage	V	690		690		690		690			
Ultimate Breaking	AC	600V	35		35		35		30			
Capacity(kA)		480/500V	42		42		42		65			
KS C 8321(Sym)		460V	65		65		65		85			
IEC60947-2(Icu)		415V	65		65		65		85			
Ics=0.5Icu		380V	65		65		65		100			
		220V	125		125		125		125			
	DC	250V	40		40		40		40			
		125V	60		60		60		60			
Trip Unit(Thermal-Magnetic)												
	Adjustable-thermal, Fixed-magnetic	FMU	○		○		○		○			
Overload protection(thermal)												
	Current setting(A) Ir	FMU	Adjustable 0.8 to x In									
Short - circuit protection(magnetic)												
	Current setting(A) Im	FMU	Fixed 10 x In									
External Dimensions(mm)			a	105	140	105	140	105	140	140	185	
			b	165		165		165		257		
			c	78.5		78.5		78.5		103		
			d	110		110		110		154		
			Certificates Obtained		Safety Certificate		Safety Certificate		Safety Certificate		Safety Certificate	

FMU
 - DB250 : Adjustable-thermal / Fixed-magnetic



FTU
 - DB250 : Fixed-thermal / Fixed-magnetic



External Dimensions and Contact Form

Model External Dimensions

DB53La DB103La DB203La	3P			4P	
DB54La DB104La DB204La		<p>Measurement of panel installation</p>	<p>Contact details</p> <p>Conductor drawing coefficient</p>	<p>Cutting measurement of panel cover (Note 1) height when nameplate exposed (Note 2) height when handle exposed</p>	

External Dimensions

DB632La DB633La DB634La	3P			4P	
		<p>Measurement of panel installation</p>	<p>Contact details</p> <p>Conductor drawing coefficient</p>	<p>Cutting measurement of panel cover (Note 1) height when nameplate exposed (Note 2) height when handle exposed</p>	



DCL

Diversification

Diversification is given to set circuit breaking condition including electric current in a long time delay, in a short time delay, in an instantaneous trip and in ground fault. This provides a variety of choices satisfaction of detailed needs.

Safety

The energy closing is stored at springs, which brings about rapid and precise operation (limited to Motor Spring, Charge Type)

DCL Standard Type

Type	Model	DCL 600/800		DCL 1000		DCL 1250		DCL 1600		DCL 2000		DCL 2500		DCL 3200		DCL 4000		
Frame size (A)		630/800		1000		1250		1600		2000		2500		3200		4000		
Rated insulation voltage (VAC)		1000		1000		1000		1000		1000		1000		1000		1000		
Rated operating voltage (VAC)		690		690		690		690		690		690		690		690		
Number of Poles (P)		3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	
Rated current (A)	Base current setting	1.0	630/800	1000	1250	1600	2000	2500	3200	4000								
		0.8	504/604	800	936	1280	1600	2000	2560	3200								
		0.63	397/504	630	787	1008	1260	1575	2016	2520								
		0.5	315/400	500	625	800	1000	1250	1600	2000								
Rated current of neutral pole (A)			630/800	1000	1250	1600	2000	2000	2000	2000								
Rated service short circuit (Ics)	IEC	With instantaneous Trip	690	42/88.2	42/88.2	50/105	50/105	55/125	55/121	65/143	75/165							
			600	50/105	50/105	50/105	50/105	65/143	65/143	75/165	85/187							
			500	50/105	50/105	65/143	65/143	65/143	65/143	75/165	85/187							
			440	55/121	55/121	65/143	65/143	75/165	75/165	85/187	85/187							
			380	55/121	55/121	65/143	65/143	75/165	75/165	85/187	85/187							
Rated short circuit making capacity (Icm)	BS	Without instantaneous	690	35/73.5	35/73.5	35/73.5	50/105	50/105	50/105	50/105	50/105							
			600	40/84	50/105	50/105	50/105	50/105	50/105	50/105	50/105							
			5000kVA	45/94.5	65/143	65/143	65/143	65/143	65/143	65/143	65/143							
Rated short time withstand current (Icw)			55	55	65	65	75	75	85	85								
Maximum total breaking time (ms)			40	40	40	40	40	40	40	40								
Closing time (ms)			60	60	60	60	60	60	80	80								
Closing operating current (A)			5	5	5	5	5	5	5	5								
Breaking current (A)			5	5	5	5	5	5	5	5								
Weigh (kg)	Fixed Type	50	62	53	66	53	66	56	68	62	70	69	75	81	90	90	100	
	Drawout Type	77	87	82	89	82	89	84	95	94	100	104	110	113	125	130	145	

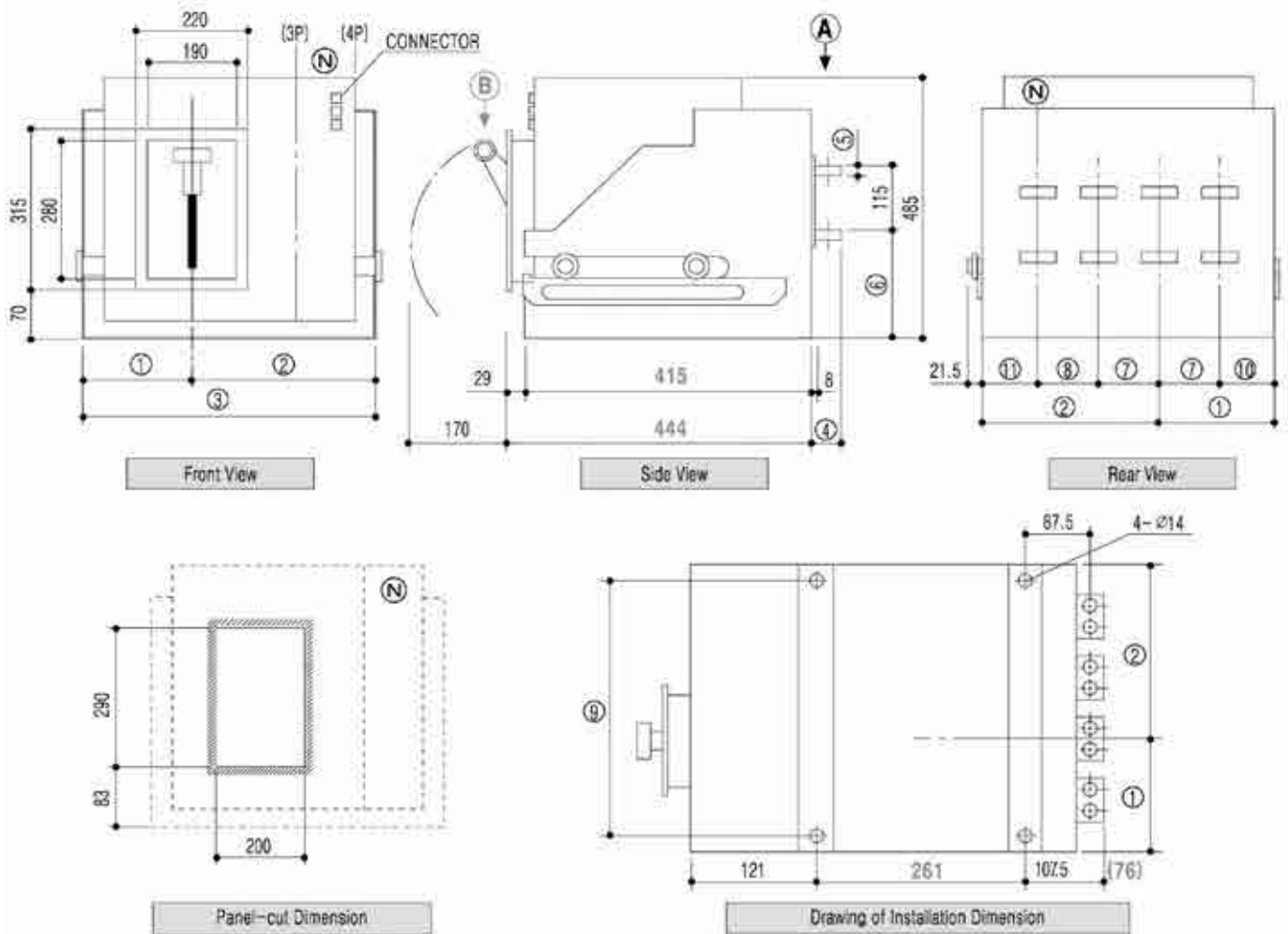
※Standard : Rack out selective, Insert coil, Trip coil, Auxilary switch(3a3b), Manual lever(exposed)

※Optional : OCR, OCGR, Auxilaty switch(4a4b), UVT, OCR output terminal, Counter gauge, I/O compatibility

※ R.S.T.N busbar is optional.



Dimension Drawout Type



Dimension table

Unit : mm

TYPE	DCL															
	600/800		1000		1250		1600		2000		2500		3200		4000	
Current capacity (A)	600/800		1000		1250		1600		2000		2500		3200		4000	
number of poles (P)	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4
No. ①	169		169		169		191.5		214		236.5		274		319	
No. ②	169	259	169	259	169	259	191.5	281.5	214	304	236.5	341.5	274	379	319	424
No. ③	338	428	338	428	338	427	383	473	428	518	473	578	548	653	638	743
No. ④	43		43		43		43		53		53		53		78	
No. ⑤	16		16		16		16		20		20		20		20	
No. ⑥	205		205		205		205		207		207		207		207	
No. ⑦	90		90		90		105		120		135		160		190	
No. ⑧		90		90		90		97.5		105		120		132.5		147.5
No. ⑨	230	320	230	320	230	320	275	365	320	410	365	470	440	545	530	635
No. ⑩	79		79		79		86.5		94		101.5		114		129	
No. ⑪	79	79	79	79	79	79	86.5	79	94	79	101.5	86.5	114	86.5	129	86.5



TS, TN Type Functions and Features

1. Excellent latching equipment.
It is reliably operated by the excellent latching mechanism. Consumes small amount of current.
2. Has an ample current flow capability
Temperature rising value is low because the main contact has been specifically designed according to standard process. Terminal is simply wired for easy connection.
3. Two-Coil Method
Adopted two-coil method, which will correspond 2 different power source (A and B) selectively.
For example: A power source is AC220V where as B power source is DC 100V.

Forte

1. Outstanding performance using excellent latching mechanism.
2. Maximizes corresponding current with the minimum operating current.
3. Closing and breaking is superbly done. closing capacity is 12 times more than rated current.
4. Compact and light weight. Suitable for emergency power supply facilities.
5. Suitable to switch from AC to DC or vice versa.

Specification

Rating		Type	DA 61 – TS, TN		DA 62– TS, TN		DA 64 – TS, TN	
Rated Voltage (V)		AC 690 V & DC 125V						
Rated Current (A)		100		200		400		
Connection		FRONT type & BACK type						
Numver of Pole (P)		3	4	3	4	3	4	
Weight (kg)	FRONT type	13	14	13	15	18	21	
	BACK type	13	14	13	15	18	21	
Opening time		≤ 0.06 sec						
Charge over time		≤ 0.08 sec						
Opening Current	AC 100V / 110V	10		10		16		
	AC 200V / 220V	5		5		8		
	DC 100V / 110V	10		10		16		
Performance	Switching capacity	AC : 3 [10xle Close / 8 xle Open cosØ = 0.35] DC : 1 [1.1xle Close / 1.1 xle Open]						
	Switching frequency	150 times / hour						
Rated shot-time current		5 kA				5 kA		
Short circuit peak value		12.5 kA				25 kA		



MS, MSN Type Functions and Features



1. The unit is designed to eliminate frequent defective works by effectively operating a grounding failure protection device.
2. The grounding effect of A.C. power source improved.
3. The danger of electric shocks arising from the ground fault accident came reduced.
4. It is designed to protect the danger of occurrence of accidents caused by phase difference effectively, especially at single phase-using points.
5. Rare occurrence of overcurrent or of arc provides the high effect protecting connecting devices from being damaged.
6. Error signals make it available to check with closing and breaking operation.

Forte

1. It has one coil, one operating contact, and one arcing chamber.
2. Specifically designed contact structure will stand out in melting over current strength.
3. Requires very small space for occupancy.

Specification

Rating		Type		DA 64/66	DA 68	DA 610	DA 612	DA 616	DA 620	DA 625	DA 632	DA 640							
		MS	MSN	MS	MSN	MS	MSN	MS	MSN	MS	MSN	MS	MSN						
Rated Voltage (V)		AC 690V & DC 125V																	
Rated Current (A)		400/600		800		1000		1200		1600		2000		2500		3200		4000	
Connection		BACK type																	
Number of Pole (P)		3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4	3	4
Weight (kg)		36	41	38	50	44	52	47	57	55	68	63	73	87	105	96	120	170	210
Opening time		≤ 0.09 sec																	
Charge over time		≤ 0.12 sec																	
Opening Current	AC 110V / 110V	10	10	10	12	16	20	20	20	24	24	36	40	60	60	80	80	80	80
	AC 200V / 220V	5	5	5	6	8	10	10	10	12	12	18	20	30	30	40	40	40	40
	DC 100V / 110V	10	10	10	12	16	20	20	20	24	24	36	40	60	60	80	80	80	80
Performance	Switching capacity	AC : 3 [10xle Close / 8 xle Open cosØ = 0.35] DC : 1 [1.1xle Close / 1.1 xle Open]																	
	Switching frequency	150 times / hour									30 time / hour								
Rated Current (A)		400	600	800		1000		1200		1600		2000		2500		3200		4000	
Rated shot-time current		10kA		15kA		22kA		25kA		35kA		50kA							
Short circuit peak value		25kA		37.5kA		50kA		62.5kA		87.5kA		125kA							

DONG-A ELECTRIC CO.,LTD.

Prequalification Statement



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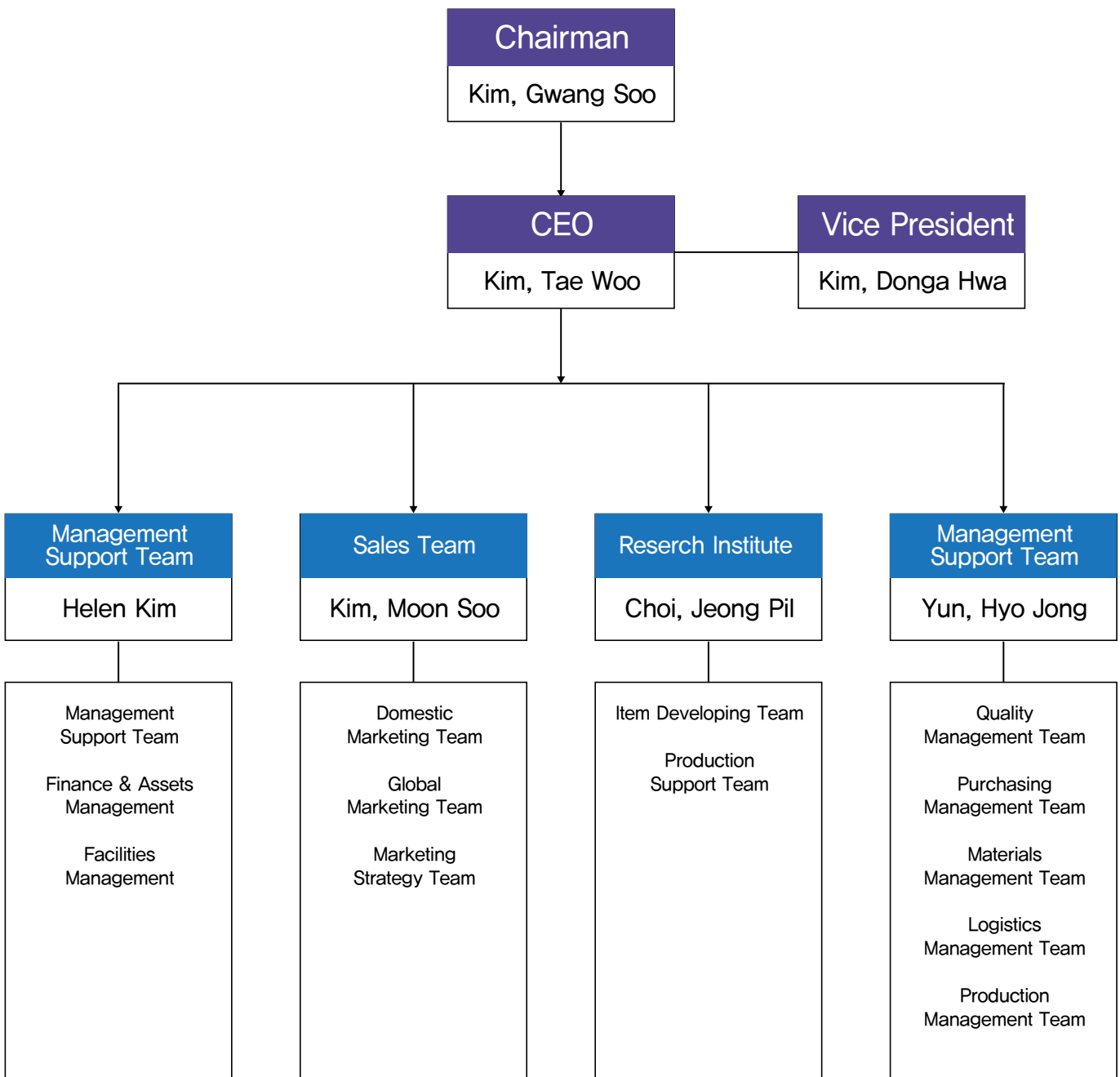
Brief History

DONG-A ELECTRIC CO.,LTD. has been consistently doing its best for the last 6 decades .

- 1955.04 Founded Dong-A Chemicals(Yeongju-dong, Jung-gu)
- 1977.12 Incorporated the company as DONG-A ELECTRIC CO.,LTD.
- 1984.03 Acquired the license to mark the approval from KR Korea Register of Shipping Association
- 1985.10 Acquired the license to mark KSC 4613/8321
- 1985.10 Acquired the license to mark KS for circuit breaker(KSC 8321)and other 1 kind
- 1987.11 Won a Million-Dollar Export Award
- 1990.01 Acquired the license to mark KS for house-use panel board(KSC 8326)
- 1997.04 Acquired ISO9001 Quality System Certification
- 2000.02 Selected as a Company-for-Export by KOTRA
- 2000.03 Acquired VDE(GERMANY-formal approval)Certification
- 2001.09 Acquired CCC Certification for electromagnetic contactor / switches
- 2002.05 Acquired CE Certification
- 2004.04 Acquired the New Products Certification(NEP)
- 2004.04 Acquired the High-Quality Certification EM(built-in ZCT) mark
- 2004.09 Won a Prime Minister' s Award at the Contest to Promote Safety Management Held by Korea Electrical Safety Corporation
- 2005.07 Won an Award for Excellent Businessman of Small-or-Medium-Sized Enterprise granted by Small and Medium Business Administration of Busan and Ulnas Area
- 2005.08 Recognized as a company-annex research institute by Korea Industrial Technology Association
- 2005.11 Won the Minister of Industry and Resources Award related with long-term national policies
- 2005.11 Designated as INNO-BIZ, an innovative small-or-medium sized enterprise
- 2006.06 Acquired the Good Product Certification for ZCT built-in MCCB by Public Procurement Service
- 2007.05 Acquired the MCCB NEP for built-in ZCT
- 2007.09 Acquired New Product Certification for zero phase current transformer and embedded circuit breakers(225A or less)
- 2008.10 Acquired the additional certifications(MCCB) of Korea Standard
- 2008.11 Acquired K5 A ISO 9001:2007 / ISO 9001:2000 Certifications for Quality Management System
- 2009.06 Extended the Good Product mark for ZCT built-in MCCB by Public Procurement Service
- 2009.10 Acquired the approval for all specifications of TUV / CE for circuit breakers / earth leakage breakers
- 2010.08 Acquired the overseas certifications for all the products(CE, TUV)
- 2010.08 Acquired CE Mark of all product (TUV Company in German)
- 2012.07 Changed the notice of certifications for K5 C 4613 and 8321 , according to change of the representative(Before: Kim, Gwansu, Representative Director, After: Lee, Man Woo, Representative Director)
- 2012.07 Changed the standard names for K5 C 4613 and 8321 , according to revision of specification (Before: earth leakage breaker, After: Industrial earth leakage breaker, Before: Circuit breaker, After: Industrial circuit breaker)
- 2013.03 Acquired the license to mark KS C 8326
- 2013.06 Acquired KS Mark (Household Panel Board)
- 2014.02 Established China factory
- 2014.06 Merger and acquisition with seoil
- 2015.07 Won The Excellent Small Businessmen awards Grand Prize by Busan Metropolitan city
- 2015.12 Acquired Promising Export Firm by the Small & Medium Business Administration, Republic of Korea.
- 2015.12 Acquired \$1-Million Export Tower Award Certificate For Outstanding Export Performance
- 2016.05 Acquired The Certificate of Product-Specific Approved Exporter
- 2016.07 Acquired IEC61009/60898 Certificate for MCCB and ELCB
- 2016.11 Inauguration of company president Kim, Tae Woo

Organization Chart

DONG-A ELECTRIC CO.,LTD. nimbly copes with the customers' requirements through the optimal organization.



Administrative Slogan

- DONG-A ELECTRIC CO.,LTD. will make a return for the customers through quality satisfaction
- Business Philosophy
- Administrative slogan and main policies of DONG-A Electric CO., LTD

Quality Management	Sales Expansion	Profit-making
To keep and enhance quality level of the products To activate technical training	To enlarge new market To expand sales volume of new products	To reduce the cost To reduce the expenses To increase productivity

Administrative policy

- Fast innovation
- Customer satisfaction
- People leadership


Quality Assurance

- DONG-A ELECTRIC CO.,LTD. put the highest priority on quality.
- Quality Policies
- Better Quality
- Better Technology
- Lower Price
- We produce the best product meeting the expectation and requirements of the customers by sustaining and developing the quality system that aims at better technology, better quality and lower price.



Certificates

1. Business Registration	99.01.26
2. INNO – BIZ	05.11.23
3. Certificate of DONG–A Laboratory	05.08.19
4. Certificate of DONG–A Laboratory	04.08.04
5. Certificate of quality management system ISO 9001	97.04.17
6. Certificate of New Excellent Product	06.01.01
7. Certificate of Excellent Product	06.06.29
8. Reward Results & Memberships	
9. Certificate of a patent & certificate of Utility Model by Korean Intellectual Property Office	05.01.24
10. Present condition of The Standard	
– Certificate of KS (MCCB etc.)	85.10.12
– Certificate of KS(ELCB etc.)	96.07.15
– Electrical Appliances Safety Certificate by Korea Electrical Safty Corporation (MCCB / ELCB / MC)	06.04.07
– Type Approval Certificate(ELD / ZCT)	84.03.20
– KR mark by Korea Register of Shipping (MCCB / MC / MS)	00.03.07
– Certificate of VDE(MC / MS)	01.09.12
– Certificate of CCC(MC / MS)	02.07.02
– Certificate of TUV, CE(MC / MS)	05.01.24
– Certificate of CE(MCCB / ELCB)	10.02.02
– Certificate of KS(Home Panel Board)	13.05.15



CERTIFICATE

of Conformity
Low Voltage Directive 73/23/EEC
as last amended by EEC Directive 93/68/EEC

Registration No.: AN 50014625 0001
Report No.: 13000724 001


Holder: Dong-A Electric Device Co., Ltd.
38, Singyeong-dong, Saha-gu
Busan 604-030
Rep. of Korea

Product: Solite
(Relays Contact)

Identification:

Type designation	100 85, 100 93, 100 70, 100 82
Technical specification	IEC 618, IEC 617, IEC 618, IEC 617
Rated voltage	AC 250V, 50/60Hz, 250V, 50/60Hz
Rated current	25V, 48V, 127V, 220V, 240V, 250V
Rated power	100VA, 150VA, 250VA, 500VA
Serial No.	N.A. (prototype)

The certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the License Holder's disposal. This is to certify that the tested sample is in conformity with all relevant provisions of Annex I of Council Directive 73/23/EEC, in its latest amended version, referred to as the Low Voltage Directive. This certificate does not imply assessment of the mass-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex III of the Directive.




Certification Body
Dipl.-Ing. U. Rößler

Collegium: 02.07.2002

TÜV Rheinland Product Safety GmbH - Am Grauen Stein - D-51105 Köln

CE - The CE marking may be used if all relevant and effective EC Directives are complied with. CE



CERTIFICATE

of Conformity
Low Voltage Directive 73/23/EEC
as last amended by EEC Directive 93/68/EEC

Registration No.: AN 50014631 0001
Report No.: 13000722 001


Holder: Dong-A Electric Device Co., Ltd.
38, Singyeong-dong, Saha-gu
Busan 604-030
Rep. of Korea

Product: Thermische Überlastschalter
(Thermal Overload Relay)

Identification:

Type designation	100 000, 100 001
Technical specification	IEC 60947-2, IEC 60947-2, IEC 60947-2, IEC 60947-2
Rated voltage	AC 250V, 50/60Hz, 250V, 50/60Hz
Rated current	16A, 25A, 40A, 63A, 100A, 160A, 250A
Rated power	100VA, 150VA, 250VA, 500VA
Serial No.	N.A. (prototype)

The certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the License Holder's disposal. This is to certify that the tested sample is in conformity with all relevant provisions of Annex I of Council Directive 73/23/EEC, in its latest amended version, referred to as the Low Voltage Directive. This certificate does not imply assessment of the mass-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex III of the Directive.



Certification Body
Dipl.-Ing. U. Rößler

Collegium: 02.07.2002

TÜV Rheinland Product Safety GmbH - Am Grauen Stein - D-51105 Köln

CE - The CE marking may be used if all relevant and effective EC Directives are complied with. CE



CERTIFICATE

of Conformity
Low Voltage Directive 73/23/EEC
as last amended by EEC Directive 93/68/EEC

Registration No.: AN 50014636 0001
Report No.: 13000724 001

Holder: Dong-A Electric Device Co., Ltd.
38, Singyeong-dong, Saha-gu
Busan 604-030
Rep. of Korea

Product: Thermische Überlastschalter
(Thermal Overload Relay)

Identification:

Type designation	100 000, 100 001
Technical specification	IEC 60947-2, IEC 60947-2, IEC 60947-2, IEC 60947-2
Rated voltage	AC 250V, 50/60Hz, 250V, 50/60Hz
Rated current	16A, 25A, 40A, 63A, 100A, 160A, 250A
Rated power	100VA, 150VA, 250VA, 500VA
Serial No.	N.A. (prototype)

The certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the License Holder's disposal. This is to certify that the tested sample is in conformity with all relevant provisions of Annex I of Council Directive 73/23/EEC, in its latest amended version, referred to as the Low Voltage Directive. This certificate does not imply assessment of the mass-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex III of the Directive.



Certification Body
Dipl.-Ing. U. Rößler

Collegium: 02.07.2002

TÜV Rheinland Product Safety GmbH - Am Grauen Stein - D-51105 Köln

CE - The CE marking may be used if all relevant and effective EC Directives are complied with. CE



CERTIFICATE

of Conformity
Low Voltage Directive 2006/95/EC

Registration No.: AN 50174966 0001
Report No.: 13603135 001

Holder: Dong-A Electric Device Co., Ltd.
38, Singyeong-dong, Saha-gu
Busan 604-030
Rep. of Korea

Product: Circuit Breaker
Moulded Case Circuit Breaker

Identification:

Type designation	100 000, 100 001
Technical specification	IEC 60947-2, IEC 60947-2, IEC 60947-2, IEC 60947-2
Rated voltage	AC 250V, 50/60Hz, 250V, 50/60Hz
Rated current	16A, 25A, 40A, 63A, 100A, 160A, 250A
Rated power	100VA, 150VA, 250VA, 500VA
Serial No.	N.A. (prototype)

The certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the License Holder's disposal. This is to certify that the tested sample is in conformity with all relevant provisions of Annex I of Council Directive 2006/95/EC, in its latest amended version, referred to as the Low Voltage Directive. This certificate does not imply assessment of the mass-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex III of the Directive.

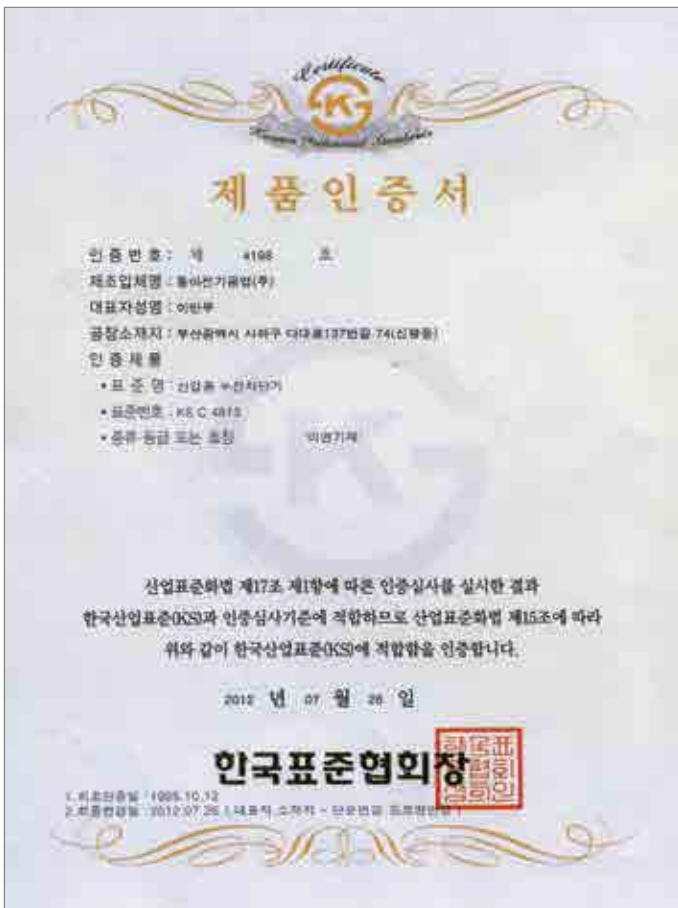


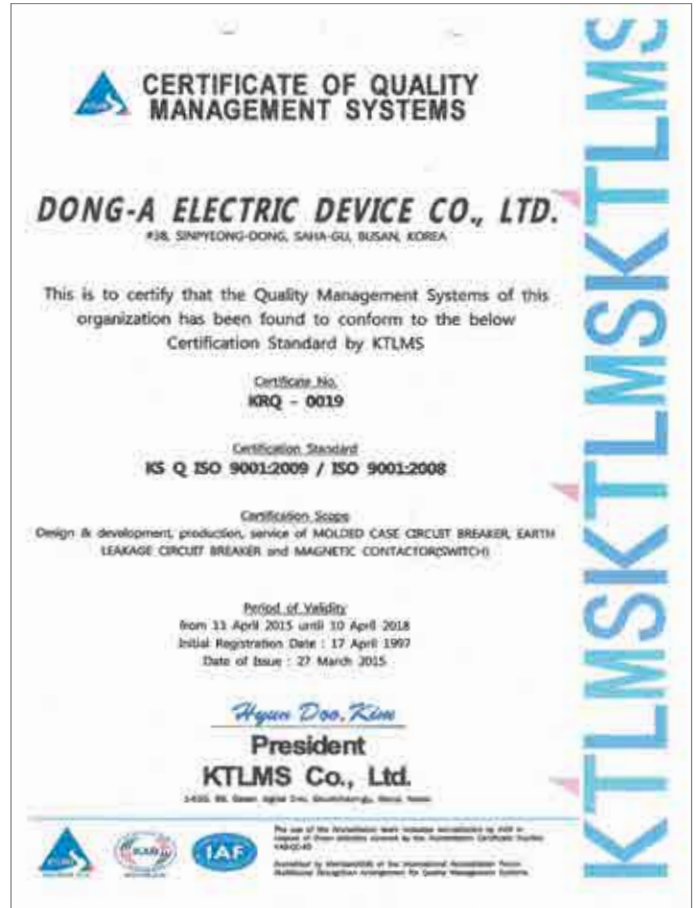
Certification Body
Dipl.-Ing. D. Löffler

Date: 02.02.2010

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

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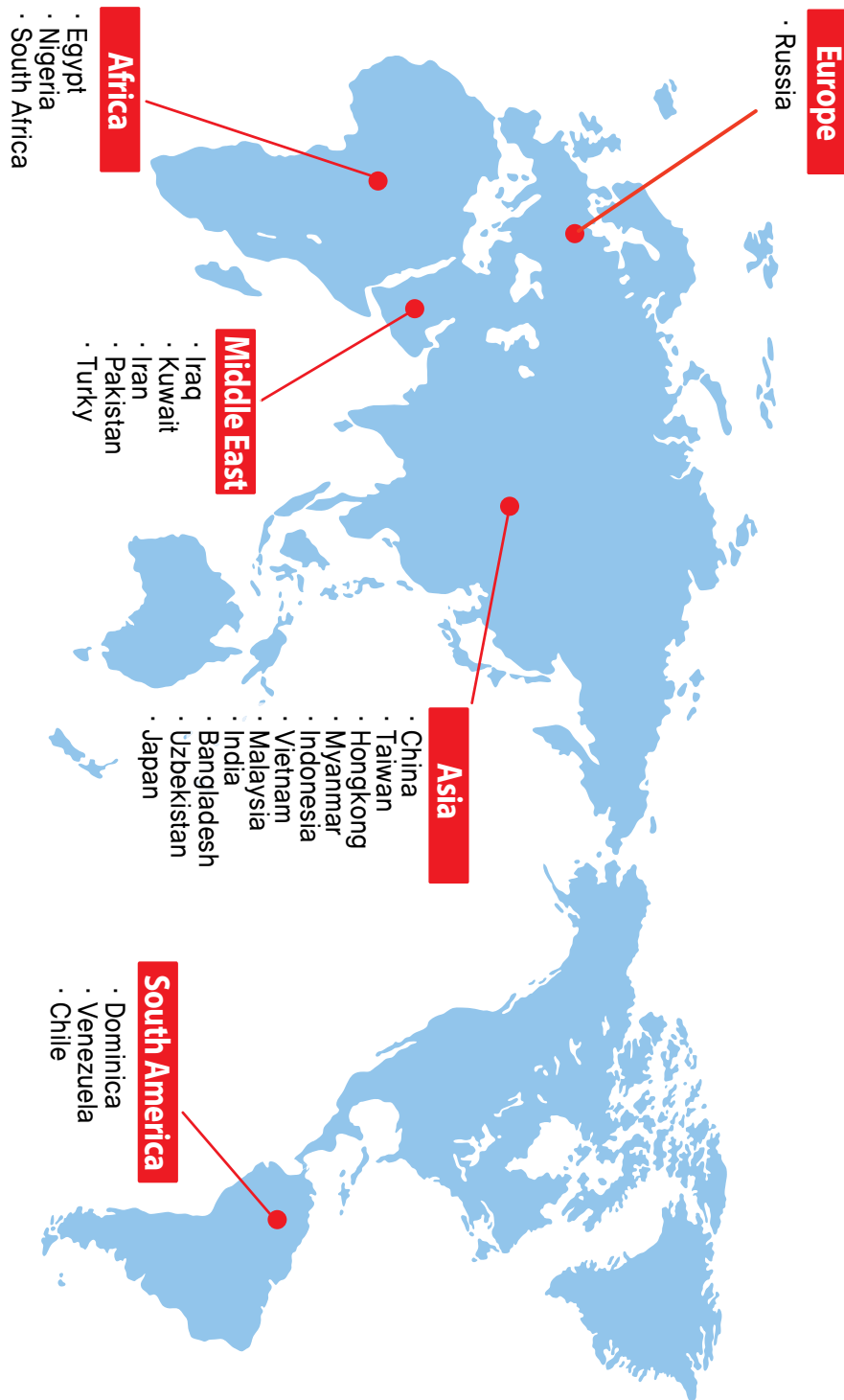
Major Account Customers

Government



Construction & Telecommunication





[Head Office] 74, Dadae-ro 137beon-gil, Saha-gu, Busan, Korea (zip code 49393)
 TEL : 82-51-200-4112 FAX : 82-81-294-0305
 E-mail : sales@donga1955.com



DONG-A ELECTRIC CO.,LTD.
 www.donga1955.com