

PRICE LIST
2019-2020

**ELECTRICAL DISTRIBUTION
& CONTROL**

FUJI ELECTRIC'S PRESENCE IN THAILAND



Fuji Electric (Thailand) Co., Ltd : FET

- Electrical Distribution & Control
- Low voltage, High voltage Inverter
- FA Components PLC, HMI, Servo, Motor
- Instrumentation
- Transmission & Distribution Plant
- Industrial Furnace
- Vending Machine



Fuji SMBE (Thailand) Co., Ltd : FST

- Manufacturing
- LV IEC 61439 Switchgear (Up to 6300A)
 - MV IEC 62271 Switchgear (7.2 KV & 24KV)
- Operation Start : 2017
New Factory : 2017
Employee : 50 persons at
Bangplee Industrial Estate,
Samutprakarn



Fuji Tusco Co., Ltd : FTU

- Manufacturing
- Transformer up to 300MVA, 245 KV
- Operation start : 1996
Fuji join operation : 2013
Employee over : 500 persons At
Bangpu Industrial,
Samutprakarn



Fuji Electric Manufacturing (Thailand) Co., Ltd : FMT

- Manufacturing
- UPS, LV Inverter, HV Inverter, Power Converter
 - Switching power supplies, Vending machine
 - 115 kV GIS
 - Switchboard up to 36kV
- Operation start : 1988
New Factory : 2013
Employee over : 700 persons At Pathumthani

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ELECTRICAL DISTRIBUTION & CONTROL

ACB DW Series Low Voltage Air Circuit Breaker (ACB)



Feature

- 2 sizes and 11 types from 1000 AF to 6300 AF of frames are covered.
- Compliant with international standards.
- Abundant main circuit terminal connection systems are available.
- Intelligent control unit
 - Large repertoire is provided from basic type only with over current protection function to enhanced type with measurement and programmable function.
 - The combination with various measuring functions, such as an ammeter, watt-hour meter, harmonic meter as well as with long time delay, short time delay, instantaneous delay, ground fault, and electric leakage is possible.
 - The parameter measurement & operation, data storage, log event recording, alarm output, and communication are possible.
 - The navigation button and LCD display are provided for easy operation.

Without ground fault protection

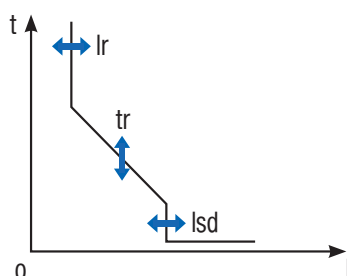
Full-featured & compact ACB.

Ideal for protecting and measuring the power receiving and distribution circuit

Type	IC (at 440V)	Poles	In (A)	AF (A)	Type	Unit Price (THB)
Fixed Type	65KA	3P	1000	1000	DW103H1P-20VV	130,440
	65KA	3P	1250	1250	DW123H1P-20VV	150,840
	65KA	3P	1600	1600	DW163H1P-20VV	163,340
	65KA	3P	2000	2000	DW203H1P-20VV	183,840
	65KA	3P	2500	2500	DW253H1P-20VV	231,840
	65KA	3P	3200	3200	DW323H1P-20VV	269,840
	65KA	3P	4000	4000	DW403H1P-20VV	433,240
	100KA	3P	5000	5000	DW503H1P-20VV	816,840
	100KA	3P	6300	6300	DW633H1P-20VV	880,840
Draw out Type	65KA	3P	1000	1000	DW103H1Q-20VV	167,740
	65KA	3P	1250	1250	DW123H1Q-20VV	185,940
	65KA	3P	1600	1600	DW163H1Q-20VV	204,340
	65KA	3P	2000	2000	DW203H1Q-20VV	233,340
	65KA	3P	2500	2500	DW253H1Q-20VV	296,340
	65KA	3P	3200	3200	DW323H1Q-20VV	375,840
	65KA	3P	4000	4000	DW403H1Q-20VV	545,640
	100KA	3P	5000	5000	DW503H1Q-20VV	1,223,840
	100KA	3P	6300	6300	DW603H1Q-20VV	1,538,740

- Prices are not included VAT
- Prices are subjected to change without notice

DW with trip unit: Type Micrologic 2.0 (Standard protection)



Functions:

- Overload protection
- Short circuit protection
- Long time delay

Standard Accessories :

- 4 Auxiliary switch (4 c/o)
- Alarm switch (ADE)
- Door frame
- Padlocking device in withdraw position (Type draw out)
- Chassis (Type draw out)

ACB DW Series Low Voltage Air Circuit Breaker (ACB)

With ground fault protection

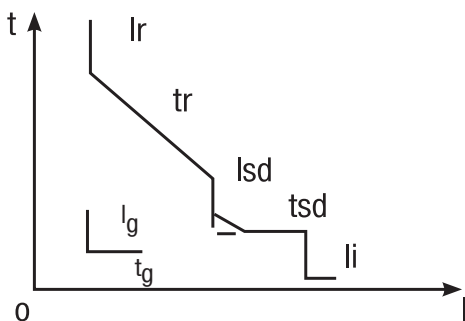
Full-featured & compact ACB.

Ideal for protecting and measuring the power receiving and distribution circuit

Type	IC (at 440V)	Poles	In (A)	AI	Type	Unit Price (THB)
Fixed Type	65KA	3P	1000	1000	DW103H1P-6EVV	216,140
	65KA	3P	1250	1250	DW123H1P-6EVV	236,540
	65KA	3P	1600	1600	DW163H1P-6EVV	249,040
	65KA	3P	2000	2000	DW203H1P-6EVV	269,540
	65KA	3P	2500	2500	DW253H1P-6EVV	317,540
	65KA	3P	3200	3200	DW323H1P-6EVV	355,540
	65KA	3P	4000	4000	DW403H1P-6EVV	518,940
	100KA	3P	5000	5000	DW503HIP-6EVV	936,340
	100KA	3P	6300	6300	DW633H1P-6EVV	1,000,340
Draw out Type	65KA	3P	1000	1000	DW103H1Q-6EVV	253,440
	65KA	3P	1250	1250	DW123H1Q-6EVV	271,640
	65KA	3P	1600	1600	DW163H1Q-6EVV	290,040
	65KA	3P	2000	2000	DW203H1Q-6EVV	319,040
	65KA	3P	2500	2500	DW253H1Q-6EVV	382,040
	65KA	3P	3200	3200	DW323H1Q-6EVV	461,540
	65KA	3P	4000	4000	DW403H1Q-6EVV	631,340
	100KA	3P	5000	5000	DW503H1Q-6EVV	1,343,340
	100KA	3P	6300	6300	DW603H1Q-6EVV	1,653,200

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DW with trip unit: Type Micrologic6.0E (Ground fault protection)



Functions:

- Overload protection
- Short circuit protection
- Long time delay
- Short time delay
- Instaneous protection
- Ground fault protection (Residual type)

Standard Accessories :

- Emergency meter 6.0E
- External CT
- External Power Supply 220V AC
- 4 Auxiliary switch (4 c/o)
- Alarm switch (SDE)
- Door frame
- Chassis (Type draw out)
- Padlocking device in withdraw position (Type draw out)

BW GLOBAL - TWIN Series

Feature

- Complies with major international standards and certifications. (IEC,JIS,CE,TUV,CCC)
- High performance and compact design breaker by FUJI's ingenious ablation breaking technology.
- Providing better user friendliness by the standardization of internal accessory parts. (32/50/63/100AF, 125/250AF, 400/630/800AF)
- Material description of major components, compliance with RoHS Directive, and lower environmental impact by Cadmium-free contact. (subject to some exceptions.)



MOLDED CASE CIRCUIT BREAKER <"Global Twin Series">

FRAME	TYPE	INTERRUPTING CAPACITY (kA)		RATED CURRENT	Unit Price (THB) POLES			ACCESSORIES Unit Price (THB)				
		230VAC	400VAC		2P	3P	4P	AUX. Sw. (W)	Alarm (K)	Shunt (F)	UVT (R)	
(AF)				(AT)								
32	BW32AAG-△P□	2.5	1.5	3, 5, 10, 15, 20, 30,32	805	1,155	-	720	720	-	-	
	BW32SAG-△P□	5	2.5	3, 5, 10, 15, 20, 30,32	1,065	1,530	-	720	720	670	-	
50	BW50AAG-△P□	2.5	1.5	5, 10, 15, 20, 30, 32, 40, 50	1,020	1,465	-	720	720	1,070	3,410	
	BW50EAG-△P□	5	2.5	5, 10, 15, 20, 30, 32, 40, 50	1,175	1,685	-	720	720	1,070	3,410	
	BW50SAG-△P□	10	7.5	5, 10, 15, 20, 30, 32, 40, 50	1,350	1,935	-	720	720	1,070	3,410	
	BW50RAG-△P□	25	10	10, 15, 20, 30, 32, 40, 50	1,520	2,185	-	720	720	1,070	3,410	
	BW50HAG-△P□	125	65	15, 20, 30, 40, 50	5,530	6,050	-	820	820	1,070	3,410	
63	BW63EAG-△P□	5	2.5	60, 63	1,290	1,855	-	720	720	1,070	3,410	
	BW63SAG-△P□	10	7.5	60, 63	1,485	2,130	-	720	720	1,070	3,410	
	BW63RAG-△P□	25	15	60, 63	1,600	2,305	-	720	720	1,070	3,410	
100	BW100AAG-△P□	5	1.5	60, 63, 75, 100	1,290	1,855	-	820	820	1,700	3,410	
	BW100EAG-△P□	25	10	50, 60, 63, 75, 100	2,280	3,275	-	820	820	1,700	3,410	
125	BW125JAG-△P□	50	30	15,20,30,40,50,60,75,100,125	2,975	4,265	5,560	810	810	1,920	4,260	
	BW125SAG-△P□-CE	85	36	15,20,30,40,50,60,75,100,125	3,475	4,960	6,550	810	810	1,920	4,260	
	BW125RAG-△P□	100	50	15,20,30,40,50,60,75,100,125	5,460	7,545	9,925	810	810	1,920	4,260	
	BW125HAG-△P□	125	65	15,20,30,40,50,60,75,100,125	6,915	9,555	-	820	820	1,920	4,260	
160	BW160EAG-△P□-O	36	18	125, 150, 160	5,820	6,800	-	940	940	1,920	4,260	
	BW160JAG-△P□-O	50	30	125, 150, 160	6,470	8,700	11,000	940	940	1,920	4,260	
	BW160SAG-△P□-O	85	36	125, 150, 160	6,850	9,130	11,910	940	940	1,920	4,260	
	BW160RAG-△P□-O	100	50	125, 150, 160	6,945	9,925	12,900	940	940	1,920	4,260	
250	BW250EAG-△P□	36	18	175, 200, 225, 250	6,115	7,140	-	940	940	1,920	4,260	
	BW250JAG-△P□	50	30	175, 200, 225, 250	6,790	9,200	11,500	940	940	1,920	4,260	
	BW250SAG-△P□	85	36	175, 200, 225, 250	7,000	9,800	12,405	940	940	1,920	4,260	
	BW250RAG-△P□	100	50	175, 200, 225, 250	7,940	11,415	14,390	940	940	1,920	4,260	
	BW250HAG-△P□	125	65	125,150, 160, 175, 200, 225, 250	8,770	11,985	-	940	940	1,920	4,260	
400	BW400EAG-△P□	50	30	250, 300, 350, 400	9,945	14,210	-	1,180	1,180	2,340	4,260	
	BW400SAG-△P□	85	36	250, 300, 350, 400	10,720	14,800	-	1,180	1,180	2,340	4,260	
	BW400RAG-△P□	100	50	250, 300, 350, 400	13,265	15,630	21,030	1,180	1,180	2,340	4,260	
	BW400HAG-△P□	125	70	250, 300, 350, 400	15,160	18,945	25,580	1,180	1,180	2,340	4,260	
630	BW630EAG-△P□	50	36	500, 600, 630	-	22,825	-	1,180	1,180	2,340	4,260	
	BW630RAG-△P□	100	50	500, 600, 630	-	24,400	32,125	1,180	1,180	2,340	4,260	
	BW630HAG-△P□	125	70	500, 600, 630	-	37,895	51,610	1,180	1,180	2,340	4,260	
800	BW800EAG-△P□	50	36	700, 800	-	37,715	-	1,180	1,180	2,340	4,260	
	BW800RAG-△P□	100	50	700, 800	-	40,690	57,270	1,180	1,180	2,340	4,260	
	BW800HAG-△P□	125	70	700, 800	-	53,055	71,620	1,180	1,180	2,340	4,260	

NOTE : △ = Poles (2P, 3P, 4P) □ = Rated Current (AT)

- Prices are not included VAT
- Prices are subjected to change without notice

BW GLOBAL - TWIN Series

External Handle (N Type and V Type)



External Handle model	Used with MCCB model	Unit Price (THB)
BZ6N10D	BW32AAG, BW32EAG, BW32SAG BW50AAG, BW50EAG, BW50SAG, BW50RAG BW63EAG, BW63SAG, BW63RAG BW100AAG, BW100EAG	1,600
BW9N0CA	BW125JAG, BW125SAG, BW125RAG	2,400
BW9N0GA	BW160EAG, BW160JAG, BW160SAG, BW160RAG BW250EAG, BW250JAG, BW250SAG, BW250RAG	2,400
BW9N0HA	BW400EAG, BW400SAG, BW400RAG	5,200
BW9N0JA	BW630EAG, BW630RAG BW800EAG, BW800RAG	5,200
BZ6V10D	BW32AAG, BW32EAG, BW32SAG BW50AAG, BW50EAG, BW50SAG, BW50RAG BW63EAG, BW63SAG, BW63RAG BW100AAG, BW100EAG	3,165
BW9V0CA	BW125JAG, BW125SAG, BW125RAG	2,785
BW9V0GA	BW160EAG, BW160JAG, BW160SAG, BW160RAG BW250EAG, BW250JAG, BW250SAG, BW250RAG	2,830
BW9V0HA	BW400EAG, BW400SAG, BW400RAG	2,950
BW9V0JA	BW630EAG, BW630RAG BW800EAG, BW800RAG	2,785

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BX Series

Molded Case Circuit Breakers



Feature

- 3 sizes and 9 frames of MCCB can cover currents rated from 100 A to 1600 A.
- Compliant with international standards.
IEC60947-2, EN60947-2, JISC8201-2-1, NEMA AB1
- Improved breaking performance because Ics (rated service short-circuit breaking capacity) is the same as Icu (rated ultimate short-circuit breaking capacity).
- Control unit & display unit
 - Abundant lineups are provided from basic type only with over current protection function to enhanced type with power quality control.
 - The combination with various measuring functions, such as an ammeter, watt-hour meter, harmonic meter as well as with long time delay, short time delay, and instantaneous delay is possible.
 - The parameter measurement & operation, data storage, log event recording, alarm output, and communication functions are possible.
- Internal accessories of various rating are prepared. (auxiliary/alarm switch, voltage/under voltage trip, etc.)
- The compact external operating handle and electric control device are also prepared. Possible to change the setting of control unit while attaching a handle

FRAME (AF)	TYPE	INTERRUPTING CAPACITY (kA)		RATED CURRENT (AT)	Unit Price (THB) POLES		ACCESSORIES Unit Price (THB)			
		220VAC	440VAC		3P	4P	AUX. Sw. (W)	Alarm (K)	Shunt (F)	UVT (R)
100	BX100HAG Δ P	100	65	100	8,140	11,740	1,100	1,100	1,700	2,500
	BX100HAE Δ P				16,030	23,160				
160	BX160HAG Δ P	100	65	160	11,360	16,400	1,100	1,100	1,700	2,500
	BX160HAE Δ P				16,380	23,400				
250	BX250HAG Δ P	100	65	250	13,320	19,200	1,100	1,100	1,700	2,500
	BX250RAE Δ P	90	50		17,920	25,870				
	BX250HAE Δ P	100	65		19,880	28,650				
400	BX400RAE Δ P	85	42	400	21,960	31,670	1,100	1,100	1,700	2,500
	BX400HAE Δ P	100	65		22,460	32,430				
630	BX630RAE Δ P	85	42	630	31,500	45,430	1,100	1,100	1,700	2,500
	BX630HAE Δ P	100	65		34,890	50,350				
800	BX800RAE Δ P	85	50	800	44,670	54,700	1,100	1,100	4,800	4,800
	BX800HAE Δ P	85	65		52,560	59,880				
1000	BX1000RAE Δ P	85	50	1000	76,220	85,000	1,100	1,100	4,800	4,800
	BX1000HAE Δ P	85	65		83,400	99,180				
1250	BX1250RAE Δ P	85	50	1250	88,000	91,420	1,100	1,100	4,800	4,800
	BX1250HAE Δ P	85	65		97,220	101,000				
1600	BX1600RAE Δ P	85	50	1600	99,880	129,400	1,100	1,100	4,800	4,800
	BX1600HAE Δ P	85	65		112,300	145,500				

NOTE : Δ = Poles (3P, 4P) / AT = Adjust Current (0.4-1 In)

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- Prices are subjected to change without notice

ELCB EW Series

Earth Leakage Circuit Breaker



Feature

- Complies with the major international standards and certifications. (IEC,JIS,CE,TUV,CCC)
- High performance and compact design breaker by FUJI's ingenious ablation breaking technology.
- Pursuit of user friendliness by standardization of internal accessory parts. (32/50/63/100AF, 125/250AF, 400/630/800AF)
- High workability can be obtained since the removal of ELCB wiring is not required at dielectric test during inspection.
- Contributes to safety and compactness by furnishing new three-phase power supply circuit acts in the event of ground fault even when the loss of one phase occurs in a three-phase system (Required in the revised IEC60947-2).
- Equipped with the newly developed leakage detection circuit, noise surge performance improves even better.
- Material description of major components, compliance with RoHS Directive, and lower environmental impact by Cadmium-free contact. (be subject to some exceptions.)

FUJI EARTH LEAKAGE CIRCUIT BREAKER

FRAME (AF)	TYPE	INTERRUPTING CAPACITY (Ka)		RATED CURRENT (AT)	SENSITIVE CURRENT (mA)	Unit Price (THB) POLES			ACCESSORIES Unit Price (THB)			
		230 VAC	400 VAC			2P	3P	4P	AUX. Sw.	Alarm Sw.	Shunt	UVT
									(W)	(K)	(F)	(R)
32	EW32AAG-△P□○	2.5	-	5, 10, 15, 20, 30, 32	15, 30, 100	●	●	-	●	●	-	-
	EW32EAG-△P□○	2.5	1.5	5, 10, 15, 20, 30, 32	15, 30, 100	-	●	-	●	●	-	-
	EW32SAG-△P□○	5	2.5	3, 5, 10, 15, 20, 30,32	30, 100/200/500	-	●	-	●	●	-	-
50	EW50AAG-△P□○	2.5	-	5, 10, 15, 20, 30, 32, 40, 50	15, 30, 100	●	●	-	●	●	-	-
	EW50EAG-△P□○	5	2.5	5, 10, 15, 20, 30, 32, 40, 50	15, 30, 100/200	-	●	-	●	●	-	-
	EW50SAG-△P□○	10	7.5	5, 10, 15, 20, 30, 32, 40, 50	30, 100/200/500	-	●	-	●	●	-	-
	EW50RAG-△P□○	25	10	10, 15, 20, 30, 32, 40, 50	30, 100/200/500	-	●	-	●	●	-	-
	EW50HAG-△P□○	125	65	15, 20, 30, 40, 50	30, 100/200/500/1000	-	●	-	●	●	-	-
60	EW63EAG-△P□○	5	2.5	60, 63	15, 30, 100/200	-	●	-	●	●	-	-
	EW63SAG-△P□○	10	7.5	60, 63	30, 100/200/500	-	●	-	●	●	-	-
	EW63RAG-△P□○	25	10	60, 63	30, 100/200/500	-	●	-	●	●	-	-
100	EW100AAG-△P□○	5	-	60, 63, 75, 100	30, 100/200/500	-	●	-	●	●	-	-
	EW100EAG-△P□○	10	-	50, 60, 63, 75, 100	30, 100/200	●	-	-	●	●	-	-
	EW100SAG-△P□○	25	10	50, 60, 63, 75, 100	30, 100/200/500	-	●	-	●	●	-	-
125	EW125JAG-△P□○	50	30	15, 20, 30, 40, 50, 60, 75, 100, 125	30, 100/200/500/1000	-	●	●	●	●	-	-
	EW125SAG-△P□○	85	36	15, 20, 30, 40, 50, 60, 75, 100, 125	30, 100/200/500/1000	-	●	●	●	●	-	-
	EW125RAG-△P□○	100	50	15, 20, 30, 40, 50, 60, 75, 100, 125	30, 100/200/500/1000	-	●	●	●	●	-	-
	EW125HAG-△P□○	125	65	15, 20, 30, 40, 50, 60, 75, 100, 125	30, 100/200/500/1000	-	●	-	-	-	-	-

FRAME (AF)	TYPE	INTERRUPTING CAPACITY (Ka)		RATED CURRENT (AT)	SENSITIVE CURRENT (mA)	Unit Price (THB) POLES			ACCESSORIES Unit Price (THB)			
		230 VAC	400 VAC			2P	3P	4P	AUX. Sw.	Alarm Sw.	Shunt	UVT
									(W)	(K)	(F)	(R)
160	EW160EAG-△P□○	36	18	125, 150, 160	30, 100/200/500/1000	-	●	-	●	●	-	-
	EW160JAG-△P□○	50	30	125, 150, 160	30, 100/200/500/1000	-	●	●	●	●	-	-
	EW160SAG-△P□○	85	36	125, 150, 160	30, 100/200/500/1000	-	●	●	●	●	-	-
	EW160RAG-△P□○	100	50	125, 150, 160	30, 100/200/500/1000	-	●	●	●	●	-	-
250	EW250EAG-△P□○	36	18	125, 150, 160, 175, 200, 225, 250	30, 100/200/500/1000	-	●	-	●	●	-	-
	EW250JAG-△P□○	50	30	125, 150, 160, 175, 200, 225, 250	30, 100/200/500/1000	-	●	●	●	●	-	-
	EW250SAG-△P□○	85	36	125, 150, 160, 175, 200, 225, 250	30, 100/200/500/1000	-	●	●	●	●	-	-
	EW250RAG-△P□○	100	50	125, 150, 160, 175, 200, 225, 250	30, 100/200/500/1000	-	●	●	●	●	-	-
	EW250HAG-△P□○	125	65	125, 150, 160, 175, 200, 225, 250	30, 100/200/500/1000	-	●	-	-	-	-	-
400	EW400EAG-△P□○	50	30	250, 300, 350, 400	30, 100/200/500/1000	-	●	-	●	●	●	●
	EW400SAG-△P□○	85	36	250, 300, 350, 400	30, 100/200/500/1000	-	●	-	●	●	●	●
	EW400RAG-△P□○	100	50	250, 300, 350, 400	30, 100/200/500/1000	-	●	●	●	●	●	●
	EW400HAG-△P□○	125	70	250, 300, 350, 400	30, 100/200/500/1000	-	●	●	●	●	●	●
600	EW630EAG-△P□○	50	36	500, 600, 630	100/200/500/1000	-	●	-	●	●	●	●
	EW630RAG-△P□○	100	50	500, 600, 630	100/200/500/1000	-	●	-	●	●	●	●
	EW630HAG-△P□○	125	70	500, 600, 630	100/200/500/1000	-	●	-	●	●	●	●
800	EW800EAG-△P□○	50	36	700, 800	100/200/500/1000	-	●	-	●	●	●	●
	EW800RAG-△P□○	100	50	700, 800	100/200/500/1000	-	●	-	●	●	●	●
	EW800HAG-△P□○	125	70	700, 800	100/200/500/1000	-	●	-	●	●	●	●

NOTE : △ = Poles (2P, 3P, 4P)

□ = Rated Current (AT)

○ = SENSITIVE CURRENT (mA)

A = 15mA, B = 30mA, C = 100mA, J = 100/300/500/1000mA, K = 100/200mA or 100/200/500mA or 100/200/500/1000mA (Changeover Type)

- If you want price of ELCB, please contact to Fuji Electric (Thailand) Co., Ltd.
- Not available product

- Prices are not included VAT

- Prices are subjected to change without notice

BE1 Series

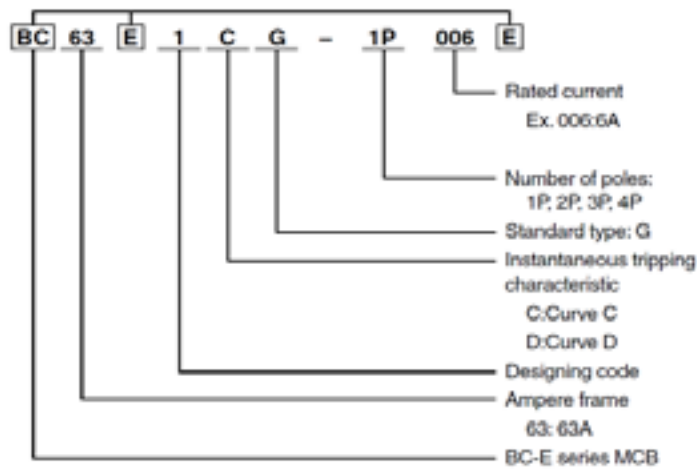
Miniature Circuit Breakers

■ BE1 Series Miniature Circuit Breaker Standards

Application

- Curve C: Illumination distribution system
Curve D: Industrial distribution system
- Overload and short circuit protection

● Type number nomenclature



Standards and Certificates

- IEC 60898-1, GB 10963.1
- CE, CCC

Working Condition

- Ambient temperature: -35°C to +70°C
- Altitude: ≤2000m
- Air humidity: ≤95%
- Pollution degree: II
- A place where there should not be significant shock or vibration

Product Features

- With short circuit current limiting structure-high breaking capacity of lated short circuit.
- Short-circuit and overload protection
- Screw clamp, shock-proof wiring terminals
- Numerous accessories available
- Modularization-random combination, series mating
- Standard TH35 mm IEC rail mounting

Specifications

- Rated voltage: AC230/400V, 50/60Hz
- Rated current: Curve C 1-63A
Curve D 1-40A
- Mechanical life: 10000 times
- Tripping characteristic: C: 5~10In
D: 10-14In

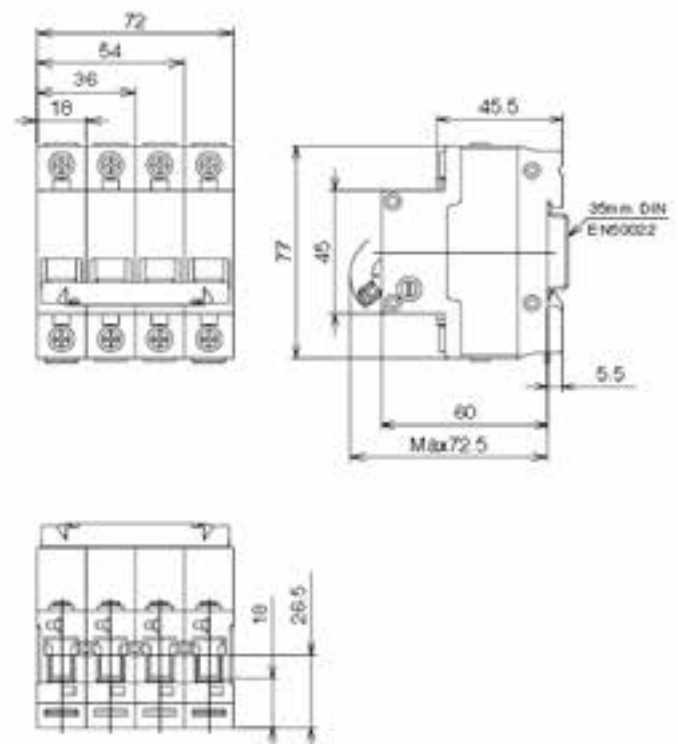
● Breaking capacity

Tripping Characteristic	Rated current (A)	Rated operational voltage (v)	Rated breaking capacity (kA)
	1-40	230/400	6
Curve C	50,63	230/400	4.5
Curve D	1-40	230/400	4.5

● Wiring Capacity

Rated current (A)	Wire size (mm ²)
In ₆₃	25

● Dimensions, mm



BE1 Series

Miniature Circuit Breakers

<2Layer Offer “BE1 Series”>



TYPE	POLE	Rated breaking capacity (kA)		RATED CURRENT (A)	Unit Price (THB)
		230VAC	400VAC		
BC32E1CN-1P□E	1P+N	4.5	-	6, 10, 16, 20, 25, 32	375
BC63E1CG-1P□E	1P	6	6	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40	190
BC63E1CG-1P□E	1P	4.5	4.5	50, 60	190
BC63E1DG-1P□E	1P	4.5	4.5	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40	300
BC63E1CG-2P□E	2P	6	6	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40	390
BC63E1CG-2P□E	2P	4.5	4.5	50, 60	390
BC63E1DG-2P□E	2P	4.5	4.5	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40	390
BC63E1CG-3P□E	3P	6	6	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40	635
BC63E1CG-3P□E	3P	4.5	4.5	50, 60	635
BC63E1DG-3P□E	3P	4.5	4.5	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40	635
BC63E1CG-4P□E	4P	6	6	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40	1,015
BC63E1CG-4P□E	4P	4.5	4.5	50, 60	1,015
BC63E1DG-4P□E	4P	4.5	4.5	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40	1,015

NOTE : □ = Rated Current (A)

ACCESSORIES			Unit Price (THB)
BC9W1SA1-E	(W)	Aux, SW	630
BC9K1SA1-E	(K)	Alarm	790
BC9FRA1-E	(F+W)	Shunt	2,650
BC9FKA1-E	(F+K)	Shunt	2,650

- Prices are not included VAT
- Prices are subjected to change without notice

CP 30 F Series

Circuit Protector



Feature

- Ultra-slim 17.5 mm per pole width
- Standard types conform to Japanese and major overseas standards IEC/EN (CE), GB (CCC), UL/CSA, KC (South Korea), JIS, PSE (Japan)
- AC/DC compatible (1P and 2P)
- Screw lift-up terminals offer finger protection (1P20 equivalent) structure without terminal cover
- Revised terminal arrangement of auxiliary circuit improves ease of wiring
- Auxiliary/alarm switch (1 NO or 1 NC) can be integrated (1P:1 switch, 2P, 3P:2 switches), standard types provided with terminal cover for auxiliary circuit
- Shunt trip equipped devices also available

Type	Poles	Rated Current	Unit Price (THB)
CP30FI-1P□	1P	0.1,0.3,0.5,1,2,3,5,7,10,15, 20,25,30	850
CP30FM-1P□	1P	0.1,0.3,0.5,1,2,3,5,7,10,15, 20,25,30	850
CP30FS-1P□	1P	0.1,0.3,0.5,1,2,3,5,7,10,15, 20,25,30	850
CP30FI-2P□	2P	0.1,0.3,0.5,1,2,3,5,7,10,15, 20,25,30	1,830
CP30FM-2P□	2P	0.1,0.3,0.5,1,2,3,5,7,10,15, 20,25,30	1,830
CP30FS-2P□	2P	0.1,0.3,0.5,1,2,3,5,7,10,15, 20,25,30	1,830
CP30FI-3P□	3P	0.1,0.3,0.5,1,2,3,5,7,10,15, 20,25,30	2,790

NOTE : □ = Rated Current
P = Poles (1,2,3)
S = Long time delay
M = Medium time delay
I = Instantaneous

Accessories

Item	Type	Unit Price (THB)
Terminal cover for aux. circuit	CP-T8 (1 pack=20pcs)	990
Terminal cover for aux. circuit	CP-T8/1 (1 pack=1pc)	60

- Prices are not included VAT
- Prices are subjected to change without notice

Add on price

Item		Type	Unit Price (THB)
Standard Load	auxiliary switch (NO)	WA	265
	auxiliary switch (NC)	WB	
	alarm switch (NO)	KA	265
	alarm switch (NC)	KB	
Low level circuit	auxiliary switch (NO)	W1A	265
	auxiliary switch (NC)	W1B	
	alarm switch (NO)	K1A	265
	alarm switch (NC)	K1B	
Combination Auxiliary switch+alarm switch		WAWA	530
		WAWB	
		WBWB	
		WAKA	530
		WAKB	
		WBKA	570
		WBKB	
		W1AW1A	
		W1AW1B	
		W1BW1B	570
		W1AK1A	
		W1AK1B	
		W1BK1A	
		W1BK1B	
Inertia delay		D	85

- Prices are not included VAT
- Prices are subjected to change without notice

SW Series

Magnetic Contactors and Overload Relay

Feature

- Can be controlled remotely instead of manual switch.
- Safety in control and maintenance.
- Accuracy
- Motor protection in case lack of phase



SW Model	Max motor Capacity (kW)		Combination Between	Aux. Con.		*Coil Voltage					Unit Price (THB)
	200-220V	380-440V		NO	NC	24V	48V	120V	240V	400V	
SW-03/3H	2.5	4	SC-03 + TR- ON/3	1	-	x	x	x	x	x	1,190
SW-0/3H	3.5	5.5	SC-0 + TR - ON/3	1	-	x	x	x	x	x	1,400
SW-05/3H	3.5	5.5	SC-05 + TR - ON/3	1	1	x	x	x	x	x	1,600
SW-4-0/3H	4.5	7.5	SC-4-0 + TR -5-1N/3	1	-	x	x	x	x	x	1,945
SW-4-1/3H	5.5	11	SC-4-1 + TR -5-1N/3	1	-	x	x	x	x	x	2,115
SW-5-1/3H	5.5	11	SC-5-1 + TR -5-1N/3	1	1	x	x	x	x	x	2,090
SW-N1/3H	7.5	15	SC-N1 + TR- N2/3	2	2	x	x	x	x	x	2,935
SW-N2/3H	11	18.5	SC-N2 + TR- N2/3	2	2	x	x	x	x	x	3,440
SW-N2S/3H	15	22	SC-N2S + TR- N3/3	2	2	x	x	x	x	x	4,475
SW-N3/3H	18.5	30	SC-N3 + TR- N3/3	2	2	x	x	x	x	x	5,170
SW-N4/3H	22	40	SC-N4 + TR- N5/3	2	2	x	x	x	x	x	7,625
SW-N5A/3H	30	55	SC-N5A + TR- N5/3	2	2	x	x	x	x	x	8,970
SW-N6/3H	37	60	SC-N6 + TR- N6/3	2	2	o	o	o	o	x	11,805
SW-N7/3H	45	75	SC-N7 + TR- N7/3	2	2	o	o	o	o	x	16,860
SW-N8/3H	55	90	SC-N8 + TR- N8/3	2	2	o	o	o	o	x	19,060
SW-N10/3H	65	110	SC-N10 + TR- N10/3	2	2	o	o	o	o	x	27,455
SW-N11/3H	90	160	SC-N11 + TR- N2/3	2	2	o	o	o	o	x	36,520
SW-N12/3H	120	220	SC-N12 + TR- N12/3	2	2	o	o	o	o	x	49,385
SW-N14/3H	180	315	SC-N14 + TR- N14/3	2	2	o	o	o	o	x	93,965

NOTE : * X : Coil operating voltage AC

O : Coil operating voltage both AC or DC

- Prices are not included VAT

- Prices are subjected to change without notice

SC Series

Magnetic Contractor 3 phase



Feature

- Electrical life: 2,000,000 operations (SC-N3 or smaller)
- Bifurcated auxiliary contacts for greater reliability
- Compliance with international standards (UL, CSA, IEC, LR, BV, etc)
- Easier to use (structured to enable easy coil replacement)
- High operating reliability due to a super magnet with built-in IC (SC-N6 or larger)
(Prevents coil burning due to voltage fluctuations and contact fusing due to floppy operation; enables using the same coils for AC/DC, increase the range, reduces switching noise, etc)
- Mirror contacts are a standard feature
- A wide range of options

SC Model	AC3, IE947-4-1		Rated Operational		Auxiliary		*Coil Voltage					Unit Price (THB)
	200-220V	380-440V	Current (A)		Contact		24V	48V	120V	240V	400V	
			200-220V	380-440V	NO	NC						
SC-03	2.5	4	11	9	1	-	x	x	x	x	x	650
SC-0	3.5	5.5	13	12	1	-	x	x	x	x	x	720
SC-05	3.5	5.5	13	12	1	1	x	x	x	x	x	890
SC-4-0	4.5	7.5	18	16	1	-	x	x	x	x	x	1,065
SC-4-1	5.5	11	22	22	1	-	x	x	x	x	x	1,235
SC-5-1	5.5	11	22	22	1	1	x	x	x	x	x	1,295
SC-N1	7.5	15	32	32	2	2	x	x	x	x	x	1,875
SC-N2	11	18.5	40	40	2	2	x	x	x	x	x	2,545
SC-N2S	15	22	50	50	2	2	x	x	x	x	x	3,125
SC-N3	18.5	30	65	65	2	2	x	x	x	x	x	3,820
SC-N4	22	40	80	80	2	2	x	x	x	x	x	5,440
SC-N5A	30	55	105	105	2	2	x	x	x	x	x	5,720
SC-N6	37	60	125	125	2	2	o	o	o	o	x	8,455
SC-N7	45	75	150	150	2	2	o	o	o	o	x	12,160
SC-N8	55	90	180	180	2	2	o	o	o	o	x	14,010
SC-N10	65	110	220	220	2	2	o	o	o	o	x	18,875
SC-N11	90	160	300	300	2	2	o	o	o	o	x	25,115
SC-N12	120	220	400	400	2	2	o	o	o	o	x	37,285
SC-N14	180	315	600	600	2	2	o	o	o	o	x	78,965
SC-N16	220	400	800	800	2	2	o	o	o	o	x	11,4630

NOTE : * X : Coil operating voltage AC

O : Coil operating voltage both AC or DC

- Prices are not included VAT

- Prices are subjected to change without notice

TR Series

Thermal Overload Relay 3 element



Feature

- There is STOP-TEST button to test yourself
- Manual/Auto reset
- Contact with 1NO+1NC

TR Model	Used with SC type	Thermal overload Setting range (A)	Unit Price (THB)
TR-0N/3	SC-03	0.1-0.15/0.15-0.24/0.24-0.36/0.36-0.54/0.48-0.72 /0.64-0.96/0.8-1.2/0.95-1.45/1.4-2.2/1.7-2.6 /2.2-3.4/2.8-4.2/4-6/5-8/6-9/7-11	850
	SC-0/SC-05	0.1-0.15/0.15-0.24/0.24-0.36/0.36-0.54/0.48-0.72 /0.64-0.96/0.8-1.2/0.95-1.45/1.4-2.2/1.7-2.6 /2.2-3.4/2.8-4.2/4-6/5-8/6-9/7-11/9-13	
TR-5-1N/3	SC-4-0	0.1-0.15/0.15-0.24/0.24-0.36/0.36-0.54/0.48-0.72 /0.64-0.96/0.8-1.2/0.95-1.45/1.4-2.2/1.7-2.6 /2.2-3.4/2.8-4.2/4-6/5-8/6-9/7-11/9-13/12-18/16-22	880
	SC-4-1		
	SC-5-1		
TR-N2/3	SC-N1	4-6/5-8/6-9/7-11/9-13/12-18/18-26/24-36	1.060
	SC-N2	4-6/5-8/6-9/7-11/9-13/12-18/18-26/24-36/32-42	
TR-N3/3	SC-N2S	7-11/9-13/12-18/18-26/24-36/28-40/34-50/45-65	1.350
	SC-N3	7-11/9-13/12-18/18-26/24-36/28-40/34-50/45-65/48-68	
TR-N5/3	SC-N4	18-26/24-36/28-40/34-50/45-65/53-80	3.250
	SC-N5A	18-26/24-36/28-40/34-50/45-65/53-80/65-95/85-105	
TR-N6/3	SC-N6	45-65/53-80/65-95/85-125	3.350
TR-N7/3	SC-N7	45-65/53-80/65-95/85-125/110-160	4.700
TR-N8/3	SC-N8	65-95/85-125/110-160/125-185	5.050
TR-N10/3	SC-N10	85-125/110-160/125-185/160-240	8.580
TR-N12/3	SC-N11	110-160/125-185/160-240/200-300	12.100
	SC-N12	160-240/200-300/240-360/300-450	
TR-N14/3	SC-N14	240-360/300-450/400-600	15.000

- Prices are not included VAT
- Prices are subjected to change without notice

SC Series

Spare Parts for Magnetic Contactors



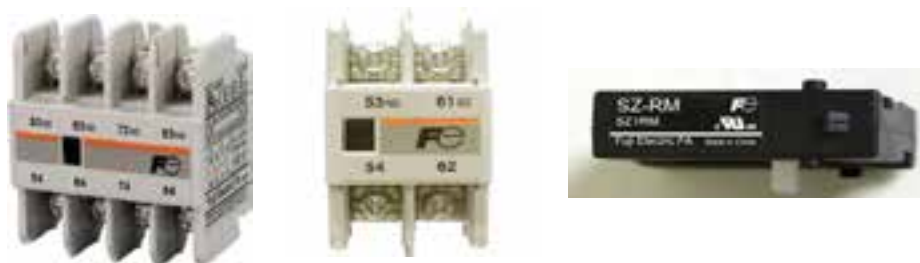
Accessories for SC (W)-03 to SC (W)-5-1

Used for contactor Type	Unit Price (THB)		
	Coil	Fixed Contact	Moving Contact
SC-03	490	60	70
SC-03	490	60	70
SC-05	490	60	70
SC-4-0	490	120	130
SC-4-1	490	120	130
SC-5-1	490	120	130
SC-N1	690	190	330
SC-N2	690	190	520
SC-N2S	770	280	610
SC-N3	770	300	630
SC-N4	5,160	370	820
SC-N5A	5,460	400	1,120
SC-N6	5,880	450	1,330
SC-N7	5,880	930	2,010
SC-N8	6,780	1,540	3,080
SC-N10	6,780	1,540	3,080
SC-N11	7,930	2,160	5,320
SC-N12	7,930	2,160	5,460
SC-N14	15,820	3,620	7,400

- Prices are not included VAT
 - Prices are subjected to change without notice

SC Series

Optional Unit for Magnetic Contactor (SC - 03 - SC - 5 - 1) and (N1 - N3)



Optional Unit		Type	Contact Arrangement	Unit Price (THB)
Auxiliary Contact Block	Front Mounting	SZ A11	1NO + 1NC	305
		SZ A22	2NO + 2NC	430
	Side Mounting	SZ AS1	1NO + 1NC	450
		SZ AS2	1NO + 1NC	405
Mechanical Interlock		SZ RM		420

SRC and SH series

Industrial Relay 3 phase

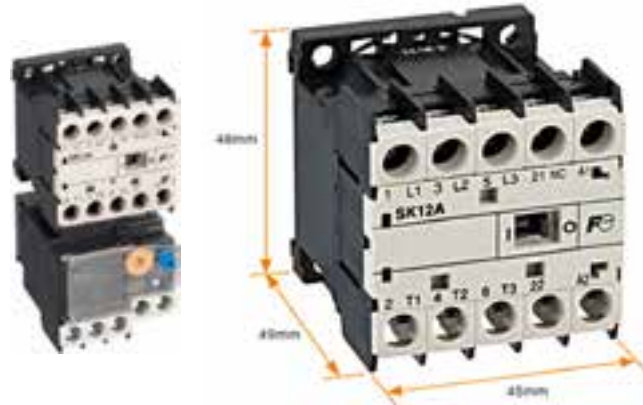


Industrial Relay Model	Related Thermal Current (A)	Contact Arrangement		Rated Voltage (V)	Coil Voltage		Unit Price (THB)
		NO	NC		220V	380V	
SH 4/4	10	2	2	550	X	X	820
SH 4/8	10	4	4	550	X	X	1,200
SH 5/5	10	3	2	550	X	X	1,045

- Please do not used auxiliary contact front mounting type and side mounting type at the same time
- Prices are not included VAT
- Prices are subjected to change without notice

SK Series

Magnetic Contactors 3 phase



Feature

- Motor Control components
- Low voltage equipment up to 600 volts
- Magnetic contactors, Magnetic starters
- Mini-Contactors and Thermal Overload Relays

SK Model	Max Motor Capacity (kW) AC3, IEC947-4-1		Rated Operational Current (A)		Auxiliary Contact		*Coil Voltage						Unit Price (THB)	
	200-220V	380-440V	200-220V	380-440V	NO	NC	12V	24V	48V	120V	220V	240V		380V
SK-06A (AC)	1.5	2.2	6	6	10		-	x	x	x	x	x	x	555
SK-09A (AC)	2.2	4	9	9	10		-	x	x	x	x	x	x	585
SK-12A (AC)	3	5.5	12	12	10		-	x	x	x	x	x	x	645
SK-06G (DC) (2.4W)	1.5	2.2	6	6	10		o	o	o	o	o	-	-	945
SK-09G (DC) (2.4 W)	2.2	4	9	9	10		o	o	o	o	o	-	-	995
SK-12G (DC) (2.4 W)	3	5.5	12	12	10		o	o	o	o	o	-	-	2,190
SK-06L (DC) (1.2 W)	1.5	2.2	6	6	10		o	o	o	-	-	-	-	990
SK-09L (DC) (1.2 W)	2.2	4	9	9	10		o	o	o	-	-	-	-	1,045
SK-12L (DC) (1.2 W)	3	5.5	12	12	10		o	o	o	-	-	-	-	2,300

NOTE : * X : Coil operating voltage AC
 o : Coil operating voltage both DC

- Prices are not included VAT
 - Prices are subjected to change without notice

TK Series

Overload and Phase-loss
Protection Relay 3 element



Feature

- Accuracy
- Motor protection in case lack of phase
- There is STOP-TEST button to test yourself
- Manual/Auto test

TR Model	Used with SC type	Thermal overload Setting range (A)	Unit Price (THB)
TK-12W	SK-06	0.1-0.15/0.13-0.2/0.18-0.27/0.24-0.36/0.3-0.45/ 0.34-0.52/0.48-0.72/0.64-0.96 0.8-1.2/0.95-1.45/1.4-2.1/1.7-2.6/2.2-3.4/2.8-4.2/4-6	850
	SK-09	0.1-0.15/0.13-0.2/0.18-0.27/0.24-0.36/0.3-0.45/ 0.34-0.52/0.48-0.72/0.64-0.96/0.8-1.2/0.95-1.45/1.4-2.1/ 1.7-2.6/2.2-3.4/2.8-4.2/4-6/5-7.5/6-9	
	SK-12	0.1-0.15/0.13-0.2/0.18-0.27/0.24-0.36/0.3-0.45/ 0.34-0.52/0.48-0.72/0.64-0.96 0.8-1.2/0.95-1.45/1.4-2.1/1.7-2.6/2.2-3.4/2.8-4.2/4-6/ 5-7.5/6-9/7-10.5/9-13	

- Prices are not included VAT
- Prices are subjected to change without notice

CT and PT for Low Voltage

Feature

The FUJI low-voltage instrument transformers are available as current transformer and potential transformer. These transformers have maximum voltage of 1150V and are suitable for circuits up to 600V. Winding have excellent mechanical thermal and electrical performance since CT's are molded in polyeaster resin and VT's in epoxy resin. They are also moisture proof and have good insulation properties. The laminated iron core is made of oriented silicon steel strip. Both VT's and CT's have a class 1.0 accuracy rating and conform to the requirements of JIS C 1731, JEC 1201 and other standards. Current transformers are available in either through type or primary-winding version



CURRENT TRANSFORMER

TYPE	PRIMARY CURRENT (A)	BURDEN (VA)	ACCURACY CLASS	Unit Price (THB)
CC3L1	100, 120, 150, 200	5	1.0	1,365
	250, 300, 400	5	1.0	1,365
	500, 600, 750	5	1.0	1,705
CC3L2	150, 180, 200	15	1.0	1,815
	240, 250, 300, 400	15	1.0	1,815
	500, 600, 750	15	1.0	2,265
CC3L3	150, 180, 200	40	1.0	2,495
	240, 250, 300, 400	40	1.0	2,605
	500, 600, 750	40	1.0	2,265
CC3P1	5, 10, 15, 20, 30	5	1.0	2,265
CC3P2	5, 10, 15, 20, 30	15	1.0	3,070
CC3P3	5, 10, 15, 20, 30	40	1.0	4,200
CC3M2	200, 250, 300	15	1.0	2,730
	400, 500,	15	1.0	2,730
	600, 750	15	1.0	3,400
CC3M3	200, 250	40	1.0	4,765
	300, 400, 500	40	1.0	4,765
	600, 750, 800	40	1.0	5,105
	1000, 1200, 1500	40	1.0	6,345
	2000	40	1.0	6,920
	2500, 3000	40	1.0	15,860
	4000	40	1.0	17,910
	5000	40	1.0	58,915
	6000	40	1.0	61,180



POTENTIAL TRANSFORMER

TYPE	Pri.Volt (V)	Sec. Volt (V)	BURDEN (VA)	Unit Price (THB)
CD32N-21	220	110	15	9,350
CD32N-41	440	110	15	9,350
CD32N-Z1	380, 400	110	15	15,885
CD34N-21	220	110	50	9,350
CD34N-41	440	110	50	9,350
CD34N-Z1	380, 400	110	50	15,885

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Metering

WM8N type wide-angle indicating switchboard instruments

Feature

- High accuracy External magnetic fields cannot influence readings.
- Accuracy class:1.5
- Easy-to-read long-scales and pointerindications can easily be read from a distance
- 110x110mm and 80 x80mm front frame sizes
- Auxiliary equipment such as shunt, impedance box and series resistor is available



WM8N type wide-angle indicating switchboard instruments

F-Type panel instruments



F-type panel instruments



Feature

- Accuracy class:2.5
- Meter scales are easy to read without error
- Compact design and budget-priced
- Meter accuracy is not affected by panel materials or adjacent currentcarrying conductors
- Complies with requirements of JIS C 1102

METER

	TYPE	SPEC.	DIMENSION (mm)		DEPTH (mm)	ACCURACY JIS C1102	Unit Price (THB)
			W	H			
AMMETER	FSN-60	for AC	60	60	48	2.5	1,660
	FMN-60	for DC	60	60	48	2.5	2,355
	FSN-80	for AC	80	80	48	2.5	1,850
	FMN-80	for DC	80	80	48	2.5	2,375
	FSN-100A	for AC	100	100	48	2.5	2,715
	FMN-100A	for DC	100	100	48	2.5	3,035
	WM8NAR6	for AC	80	80	124	1.5	7,320
	WM8NAM6	for DC	80	80	124	1.5	7,830
	WM8NAR3	for AC	110	110	111	1.5	7,320
	WM8NAM3	for DC	110	110	111	1.5	7,830
VOLTMETER	FSN-60	for AC	60	60	48	2.5	2,970
	FMN-60	for DC	60	60	48	2.5	2,355
	FRN-60	Transducing	60	60	48	2.5	2,700
	FSN-80	for AC	80	80	48	2.5	3,230
	FMN-80	for DC	80	80	48	2.5	2,375
	FRN-80	Transducing	80	80	48	2.5	2,870
	FSN-100A	for AC	100	100	48	2.5	3,155
	FMN-100A	for DC	100	100	48	2.5	2,715
	FRN-100A	Transducing	100	100	48	2.5	4,550
	WM8NVR6	for AC	80	80	124	1.5	7,320
	WM8NVM6	for DC	80	80	124	1.5	7,830
	WM8NVR3	for AC	110	110	111	1.5	7,320
	WM8NVM3	for DC	110	110	111	1.5	7,830

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Switchboard Instruments

Power line multi-meter WE1MA



Description

Perform measurement and monitoring for 213 points in 52 categories for 3-phase/3 wire, and 3-phase/4-wire

Feature

- With one unit, you can measure or monitor the voltage, current, demand current, power, demand power, reactive power, apparent power, power factor, frequency, harmonic effective value (A,V), distortion, harmonic content rate, active energy and reactive energy.
- The unit supports 3-phase/3-wire and 3-phase/4-wire.
- The measurements are displayed using a four-element display: one display on the main monitor and three displays on the sub-monitors along with a bar graph.
- Outputs include four analog circuits, a pulse output, an alarm output and a communications output (according to specification).
- Communications output supports F-MPC Net, Modbus RTU, and RS-485 (according to user specification).
- All models comply with the RoHS Directive (i.e., lead-free).

Power line multi-meter

TYPE	MEASUREMENT	INPUT SPECIFICATION		UNIT PRICE (THB)
WE1MA-EFF11-M11	Current (max. demand, demand, instataneous), power (max. demand, demand, instataneous), voltage, power factor, frequency, reactive power, active energy, reactive energy, harmonic effective value, distortion, and harmonic content rate	Input circuits Single-phase/2-wire, Single-phase/3-wire, 3-phase/3-wire or all common	Input range 150V/300V, 5A	30,000
WE1MA-E4B11-M11	Current (max. demand, demand, instataneous), power(max. demand, demand, instataneous), voltage, power factor, frequency, reactive power, apparent power, active energy, reactive energy, harmonic effective value, distortion, and harmonic content rate	3-phase/4-wire	440/3V, 5A	30,000

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The maximum value (maximum demand current. Others), minimum value can be checked by pressing max/min button.





Command Switch





Feature

- The emergency stop pushbuttons employ FUJI's original Trigger Action mechanism.
- They are suitable for emergency stop and safety. This mechanism prevents the contacts from moving until the button is pushed and locked.
- Provided with a Trigger Action mechanism conforming to EN418
- Provided with direct opening action (approved by TUV) conforming to EN60947-5-1 and EN60947-5-5

Pushbutton Switches 22 mm./30 mm. dia





Operator		Action type	Contact	Ordering code	Botton Color	Unit Price (THB)
Flush round head	22 mm. 	Momentary	1NO	AR22F0R10_	R,G,W,Y,B	300-
			1NC	AR22F0R01_	R,G,W,Y,B	300-
			1NO+1NC	AR22F0R11_	R,G,W,Y,B	410-
	30 mm. 	Momentary	1NO	AR30F0R10_	R,G,W,Y,B	350-
			1NC	AR30F0R01_	R,G,W,Y,B	350-
			1NO+1NC	AR30F0R11_	R,G,W,Y,B	460-
Extended round head	22 mm. 	Momentary	1NO	AR22E0R10_	R,G,W,Y,B	300-
			1NC	AR22E0R01_	R,G,W,Y,B	300-
			1NO+1NC	AR22E0R11_	R,G,W,Y,B	410-
	30 mm. 	Momentary	1NO	AR30E0R10_	R,G,W,Y,B	350-
			1NC	AR30E0R01_	R,G,W,Y,B	350-
			1NO+1NC	AR30E0R11_	R,G,W,Y,B	460-
Mushroom head	22 mm. 	Momentary	1NO	AR22M0R10_	R,G	330-
			1NC	AR22M0R01_	R,G	330-
			1NO+1NC	AR22M0R11_	R,G	440-
	30 mm. 	Momentary	1NO	AR30M0R10_	R,G	370-
			1NC	AR30M0R01_	R,G	370-
			1NO+1NC	AR30M0R11_	R,G	480-
Giant head	30 mm. 	Momentary	1NO	AR30B0R10_	R	370-
			1NC	AR30B0R01_	R	370-
			1NO+1NC	AR30B0R11_	R	480-

Emergency stop pushbutton Switches 22mm./30mm. Dia

Operator		Action type	Contact	Ordering code	Botton Color	Unit Price (THB)
Flush round head	22 mm. 	Push-lock, turn-reset (Head 40mm dia.)	1NO	AR22V2R10_	R,G,W,Y,B	1040-
			1NC	AR22V2R01_	R,G,W,Y,B	1040-
			1NO+1NC	AR22V2R11_	R,G,W,Y,B	1,150-
	30 mm. 	Push-lock, turn-reset (Head 40mm dia.)	1NO	AR30V2R10_	R,G,W,Y,B	1,100-
			1NC	AR30V2R01_	R,G,W,Y,B	1,100-
			1NO+1NC	AR30V2R11_	R,G,W,Y,B	1,210-





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Illuminated pushbutton Switches 22 mm./30 mm. dia



Operator		Action type	Lamp Voltage	Contact	Ordering code	Lens Color	Unit Price (THB)			
Extended round head	22mm. (Incandescent lamp) Lamp Base : BA9S 	Momentary	24V AC/DC (without transformer)	1NO	AR22E0L10E4_	R.G.W.Y.S	510-			
				1NC	AR22E0L01E4_	R.G.W.Y.S	510-			
				1NO+1NC	AR22E0L11E4_	R.G.W.Y.S	620-			
			200-220V AC (with transformer) Lamp : 6.3V	1NO	AR22E0L10M4_	R.G.W.Y.S	770-			
				1NC	AR22E0L01M4_	R.G.W.Y.S	770-			
				1NO+1NC	AR22E0L11M4_	R.G.W.Y.S	880-			
	30mm. (Incandescent lamp) Lamp Base : BA9S 	Momentary	24V AC/DC (without transformer)	1NO	AR30E0L10E4_	R.G.W.Y.S	680-			
				1NC	AR30E0L01E4_	R.G.W.Y.S	680-			
				1NO+1NC	AR30E0L11E4_	R.G.W.Y.S	790-			
			200-220V AC (with transformer) Lamp : 6.3V	1NO	AR30E0L10M4_	R.G.W.Y.S	940-			
				1NC	AR30E0L01M4_	R.G.W.Y.S	940-			
				1NO+1NC	AR30E0L11M4_	R.G.W.Y.S	1050-			
Extended with transparent full guard (24mm. dia.)	22mm. (Incandescent lamp) Lamp Base : BA9S 	Momentary	24V AC/DC (without transformer)	1NO	AR22G4L10E4_	R.G.W.Y.S	570-			
				1NC	AR22G4L01E4_	R.G.W.Y.S	570-			
				1NO+1NC	AR22G4L11E4_	R.G.W.Y.S	680-			
			200-220V AC (with transformer) Lamp : 6.3V	1NO	AR22G4L10M4_	R.G.W.Y.S	910-			
				1NC	AR22G4L01M4_	R.G.W.Y.S	910-			
				1NO+1NC	AR22G4L11M4_	R.G.W.Y.S	1020-			
			Extended with full guard (24mm dia.)	30mm. (Incandescent lamp) Lamp Base : BA9S 	Momentary (Normal guard)	24V AC/DC (without transformer)	1NO	AR30G3L10E4_	R.G.W.Y.S	800-
							1NC	AR30G3L01E4_	R.G.W.Y.S	800-
							1NO+1NC	AR30G3L11E4_	R.G.W.Y.S	910-
200-220V AC (with transformer) Lamp : 6.3V	1NO	AR30G3L10M4_				R.G.W.Y.S	1,160-			
	1NC	AR30G3L01M4_				R.G.W.Y.S	1,160-			
	1NO+1NC	AR30G3L11M4_				R.G.W.Y.S	1,270-			

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Selector Switches 22mm./30mm. Dia

Operator		Action type	Contact	Ordering code	Knob Color	Unit Price (THB)
Knob	22mm. 	2-position, maintained	1NO+1NC	AR22PR-211_	B	460-
		3-position, maintained	1NO+1NC	AR22PR-311_	B	460-
		3-position, spring return	2NO+2NC	AR22PR-122_	B	1,100-
	30mm. 	2-position, maintained	1NO+1NC	AR30PR-211	B	500-
		3-position, maintained	1NO+1NC	AR30PR-311_	B	500-
		3-position, spring return	2NO+2NC	AR30PR-122_	B	1,120-
Lever	22mm. 	2-position, maintained	1NO+1NC	AR22WR-211_	B	530-
		3-position, maintained	1NO+1NC	AR22WR-311_	B	530-
	30mm. 	2-position, maintained	1NO+1NC	AR30WR-211_	B	660-
		3-position, maintained	1NO+1NC	AR30WR-311_	B	660-

Illuminated Selector Switches 22mm./30mm. dia.

Operator		Action type	Lamp Voltage	Contact	Ordering code	Lens Color	Unit Price (THB)
Knob	22mm. (Incandescent lamp) Lamp Base : BA9S 	2-position, maintained	200-220V AC (with transformer)	1NO+1NC	AR22PL-211M4_	R.G	1,320-
		3-position, maintained	Lamp : 6.3V	1NO+1NC	AR22PL-311M4_	R.G	1,320-
	30mm. (Incandescent lamp) Lamp Base : BA9S 	2-position, maintained	200-220V AC (with transformer)	1NO+1NC	AR30PL-211M4_	R.G	1,490-
		3-position, maintained	Lamp : 6.3V	1NO+1NC	AR30PL-311M4_	R.G	1,490-

Key Switches 22mm./30mm. Dia

Operator		Action type	Contact	Ordering code	Key removable position	Unit Price (THB)
Cylinder key	22mm. 	2-position, maintained	1NO+1NC	AR22JR-2A11A	Left	840-
		3-position, maintained	1NO+1NC	AR22JR-3A11A	Left	840-
	30mm. 	2-position, maintained	1NO+1NC	AR30JR-2A11A	Left	880-
		3-position, maintained	1NO+1NC	AR30JR-3A11A	Left	880-

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Pilot light 22mm./30mm. Dia

Operator		Lamp Base	Lamp Voltage	Ordering code	Lens Color	Unit Price (THB)
Dome	22mm. (Incandescent lamp) 	BA9S	24V AC/DC (without transformer)	DR22D0L-E4_	A,R,G,W,Y,S	260-
		BA9S (Lamp : 6.3V)	200-220V AC (with transformer)	DR22D0L-M4_	A,R,G,W,Y,S	550-
	30mm. (Incandescent lamp) 	BA9S	24V AC/DC (without transformer)	DR30D0L-E4_	A,R,G,W,Y,S	300-
		BA9S (Lamp : 6.3V)	200-220V AC (with transformer)	DR30D0L-M4_	A,R,G,W,Y,S	580-
Faceted	30mm. (Incandescent lamp) 	BA9S (Lamp : 6.3V)	200-220V AC (with transformer)	DR30K0L-M4_	A,R,G,W,Y,S	610-
Flush square (Transparent lens)	22mm. (Incandescent lamp) 	BA9S (Lamp : 6.3V)	200-220V AC (with transformer)	DR22F4M-M4_	A,R,G,W,Y,S	580-
Extended square	22mm. (Incandescent lamp) 	BA9S (Lamp : 6.3V)	200-220V AC (with transformer)	DR22E3M-M4_	A,R,G,W,Y,S	560-

Accessories for AR22 Series, AR30 Series

Operator	Specifications	Contact	Ordering code	Body Color	Unit Price (THB)
Contact Block	AC15 : 6A	1NO	AR9B290	Blue	110-
	AC15 : 6A	1NC	AR9B291	Red	110-

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HH-C Series

Industrial Control Relay

Feature

- The products have obtained the CCC certification and can satisfy the market demands
- Standard products have been approved by UL, CSA and TUV
- The series products are equipped with an operating indicator (LED), ensuring a clear glance of work status
- The products are environmentally friendly and conformed to regulations on pollution control of electronic information product



HH52P-LC



HH53P-LC



HH54P-LC



INDUSTRIAL CONTROL RELAY <2 Layer Offer “HH-C Series”>

DESCRIPTION		TYPE	Poles	“Operating indicator”	Current	Unit Price (THB)
Standard (Coil AC or DC)	Single	HH52P-C AC110V	2PDT	not equipped	5A	190
		HH52P-C AC200V	2PDT	not equipped	5A	190
		HH52P-C DC24V	2PDT	not equipped	5A	190
		HH52P-C DC48V	2PDT	not equipped	5A	190
		HH53P-C AC110V	3PDT	not equipped	5A	205
		HH53P-C AC200V	3PDT	not equipped	5A	205
		HH53P-C DC24V	3PDT	not equipped	5A	205
		HH53P-C DC48V	3PDT	not equipped	5A	205
		HH54P-C AC110V	4PDT	not equipped	3A	220
		HH54P-C AC200V	4PDT	not equipped	3A	220
		HH54P-C DC24V	4PDT	not equipped	3A	220
		HH54P-C DC48V	4PDT	not equipped	3A	220
With LED (Coil AC or DC)	Single	HH52P-LC AC110V	2PDT	equipped	5A	220
		HH52P-LC AC200V	2PDT	equipped	5A	220
		HH52P-LC DC24V	2PDT	equipped	5A	220
		HH52P-LC DC48V	2PDT	equipped	5A	220
		HH53P-LC AC110V	3PDT	equipped	5A	235
		HH53P-LC AC200V	3PDT	equipped	5A	235
		HH53P-LC DC24V	3PDT	equipped	5A	235
		HH53P-LC DC48V	3PDT	equipped	5A	235
		HH54P-LC AC110V	4PDT	equipped	3A	250
		HH54P-LC AC200V	4PDT	equipped	3A	250
		HH54P-LC DC24V	4PDT	equipped	3A	250
		HH54P-LC DC48V	4PDT	equipped	3A	250

DESCRIPTION	TYPE	Used with	“Finger Protection”	Unit Price (THB)
Socket	TP58X1-EC	For 2P	Include	200
	TP511X1-EC	For 3P	Include	200
	TP514X1-EC	For 4P	Include	230
	TP58X1-C	For 2P	not Include	190
	TP511X1-C	For 3P	not Include	190
	TP514X1-C	For 4P	not Include	215

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HH Series

Industrial Control Relay

Feature

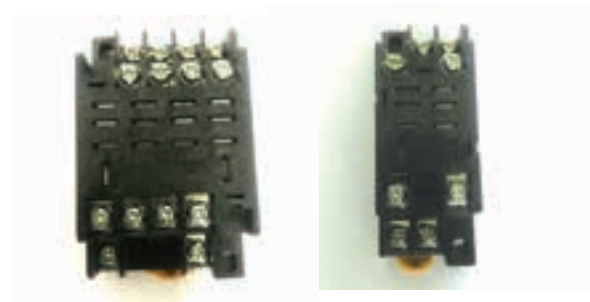
- 3.5 and 7 Amp. Contacts
- Reliable operation, long service life
- Solder, PC board, wire wrap and screw terminal socket
- Barried contacts for opposite polarity available
- Approved by UL, CSA and TUV
- 2PDT, 3PDT and 4PDT
- High dielectric strength
- AC or DC coils
- Dust proof enclosures



INDUSTRIAL CONTROL RELAY (HH52, 53, 54)

Description			Type	Unit Price (THB)	Type	Unit Price (THB)
Standard (Coil AC or DC)	Single	2PDT	HH52P	500	HH52S	670
		3PDT	HH53P	500	HH53S	670
		4PDT	HH54P	580	HH54S	670
	Bifurcated (gold-plated)	2PDT	HH52PW	525	HH52SW	780
		4PDT	HH54PW	605	HH54SW	780
With LED (Coil AC or DC)	Single	2PDT	HH52P-L	520		
		3PDT	HH53P-L	520		
		4PDT	HH54P-L	600		
	Bifurcated (gold-plated)	2PDT	HH52PW-L	540		
		4PDT	HH54PW-L	620		
With surge suppression diode (Coil DC)	Single	2PDT	HH52P-F	530	HH52S-F	700
		3PDT	HH53P-F	530	HH53S-F	700
		4PDT	HH54P-F	610	HH54S-F	700
	Bifurcated (gold-plated)	2PDT	HH52PW-F	550	HH52SW-F	750
		4PDT	HH54PW-F	630	HH54SW-F	750
With surge suppression diode and LED (Coil DC)	Single	2PDT	HH52P-FL	580		
		3PDT	HH53P-FL	580		
		4PDT	HH54P-FL	660		
	Bifurcated (gold-plated)	2PDT	HH52PW-FL	600		
		4PDT	HH54PW-FL	680		
With surge suppression CR (Coil AC)	Single	2PDT	HH52P-CR	550		
		3PDT	HH53P-CR	550	HH53S-CR	720
		4PDT	HH54P-CR	630		
	Bifurcated (gold-plated)	2PDT	HH52PW-CR	570	HH52SW-CR	960
		4PDT	HH54PW-CR	670		
With surge suppression CR and LED (Coil AC)	Single	2PDT	HH52P-CRL	600		
		3PDT	HH53P-CRL	600		
		4PDT	HH54P-CRL	680		
	Bifurcated (gold-plated)	2PDT	HH52PW-CRL	620		
		4PDT	HH54PW-CRL	780		
Magnetically held	Single	2PDT	HH52P-R	650	HH52S-R	950
	Bifurcated	2PDT	HH52PW-R	835	HH52SW-R	950

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Socket for Relay (HH 52, 53, 54)

Description	Used With	Type	Unit Price (THB)
Soldering	HH52P	TP58	40
	HH53P	TP511	105
	HH54P	TP514	65
PC board	HH52P	TP58B	80
	HH53P	TP511B	105
	HH54P	TP514B	60
Rail mounting screw terminal M3.5	HH52P	TP58X2	220
	HH53P	TP511X2	255
	HH54P	TP514X2	285

Note :
Standard coil voltage :

AC	DC
6V AC 50/60Hz	6V DC
12V AC 50/60Hz	12V DC
24V AC 50/60Hz	24V DC
48V AC 50/60Hz	48V DC
100-110V AC 50/60Hz	100-110V DC
110-120V AC 50/60Hz	
200-220V AC 50/60Hz	
220-240V AC 50/60Hz	

- NOTE :** F : with surge suppression device (DC)
 FL : with surge suppression device and indicator(DC)
 CR : with surge suppression device (AC)
 CRL : with surge suppression device and indicator (AC)

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Time Relay MS 4S Series

Super Timer



Feature

- Direct-reading time scale and compact body MS4S Super Timer MS4S series Super Timers feature and easy setting and direct-reading system of four time scale.
- MS4SM timer is multimode operation type and MS4SC timers are on-delay operation type.

Multifunction time / On-delay time (MS4SM,MS4SA,MS4SC)

Type Timer	Ordering code	Input Voltage	Operation	Contact	Timing range	Unit Price (THB)
MS4SM	MS4SM-AP	100-240VAC	On-delay	Timed : 2PDT 5A (11 pin)	Total 16 ranges	1,475
	MS4SM-CE	24VAC/DC	Flicker		0.005-0.6s, 0.1-1.2s	
	MS4SM-DL	48-127VDC	One-shot		0.25-3S, 0.05-6s	
			Signal-off delay		0.5-6(s, min, h)1-12 (s, min, h)	
MS4SA	MS4SA-AP	100-240VAC	On-delay	Timed : 2PDT 5A	2.5-30 (s, min, h)	1,365
	MS4SA-CE	24VAC/DC				
	MS4SA-DL	48-127VDC				
MS4SC	MS4SC-AP	100-240VAC	On-delay	Time delay SPDT With Instantaneous SPDT 5A	5-60 (s, min, h)	1,595
	MS4SC-CE	24VAC/DC				
	MS4SC-DL	48-127VDC				

Off-delay and Star-Delta timers

Type Timer	Ordering code	Input Voltage	Operation	Contact	Timing range	Unit Price (THB)
MS4SF	MS4SF-AP	100-240VAC	OFF-delay	Timed : 2PDT 5A	0.05-0.6 (s, min)	2,265
	MS4SF-CE	24VAC/DC			0.1-1.2 (s, min)	
	MS4SF-DL	48-127VDC			0.5-6 (s, min)	
	MS4SF-AP-*R	100-240VAC		Timed : 2PDT 5A With Inst. Reset : SPDT	1-12 (s, min)	2,265
	MS4SF-CE-*R	24VAC/DC				
	MS4SF-DL-*R	48-127VDC				
MS4SY	MS4SY-AP	100-240 VAC	Star-delta timer		Star Starting time 0.5-6s, 1-12s 5-60s, 10-120s	2,210



Socket and adaptor

Type	Description	Unit Price (THB)
TX4	Flush mount adaptor (used with flush mount socket)	115
TP411SBA	Flush mount socket 11 pin for MS4Sm timers	230
TP48SB	Flush mount socket 8 pin for MS4S timers	250
TP411X	Socket for surface mounting 11 PIN for timer MS4SM	200
TP48X	Socket for surface mounting 8 PIN for timer MS4S	200

- Prices are not included VAT
- Prices are subjected to change without notice

AFaC series

Low Voltage Fuse



Feature

- These fuses have a high interrupting capacity of 100kA at 600 V AC or DC and are suitable for power and control circuits.
- The fuse is a plug-in type, and it can easily be replaced by removing a screw cap
- Rated current : 3-400 Amps

Model	Rated Current	Interrupting Capacity (kA)	Unit price (THB)
AFaC-3 to 30	3-30	100	1,350
AFaC-40 to 60	40-60	100	1,850
AFaC-75 to 100	75-100	100	2,850
AFaC-150	125-200	50	6,500
CG-30	Cover used for AFaC		160



Spare components of AFaC

Fuse-link	Rated Current (A)	Interrupting Capacity (kA)	Unit Price (THB)
BLA-003	3	100	120
BLA-005	5	100	120
BLA-010	10	100	120
BLA-015	15	100	120
BLA-020	20	100	120
BLA-030	30	100	120
BLA-040	40	100	190
BLA-060	60	100	190
BLA-075	75	100	300
BLA-100	100	100	300
BLA-125	125	50	390
BLA-150	150	50	400
BLA-200	200	50	440

- Prices are not included VAT
- Prices are subjected to change without notice

*If you used Rated Current 300,400 Amps, please contact to Fuji Electric (Thailand) Co., Ltd.

F-MPC Series

F-MPC 60B Series

Protection Relay

F-MPC 04 Series

Monitoring System



F-MPC 60B



F-MPC 04



Feature

- This is multifunction relay which brings functions of protection, measuring, monitoring transmission.
- It can protect many protection factors by itself. (detail below)
- Even when internal fault occur, it will prevent a miss-trip by The internal CPU, duplication of analog circuit, AND output treatment.
- It always monitor internal movement by itself.
- It can be coordinated with higher network system by RS485,MODBUS, Analog output 4-20mA.

Description	Type Number	Specification	Unit Price (THB)
F-MPC60B	UM43FG-E5AK	Power Receiving 50G/51G	123,600
F-MPC60B	UM42F-E5A	Power Receiving 67DG	144,200
F-MPC60B	UM-42C-E5A	Feeder 67DG	123,600
F-MPC30	UM5ACG-H5R	Feeder	57,925
F-MPC30	UM45MG-H5R	Motor Feeder	61,660
F-MPC04	UM04-ARA4	RS485 3ph4Wire/3ph3Wire	98,570
F-MPC04P	UM02-AR4	3ph4W	105,465
F-MPC04S	UM03-ARA3	3ph3W	5,840
CT-BOX	UM01X-0	CT 2nd 7.34mA	23,890
	UM04X-1	CT 2nd 1A	23,890
	UM04X-5	CT 2nd 5A	23,890
Cable for CT-BOX	AUX014-201	1m	4,020
	AUX014-202	2m	4,530
	AUX014-203	3m	5,335
TERMINAL RELAY	RS16-DE04H		7,210
DISPLAY TERMINAL	UM02X-S		20,600
CONNECTION TABLE	UM02X-C005	0.5m	5,150
	UM02X-050	5m	10,300
CT MICRO	CC2A81-0057		2,790
CT ROUND	CC2C74-1001	CT 100/1A 36mm2	8,450
	CC2C74-2001	CT 200/1A 36mm2	8,450
	CC2C74-4001	CT 400/1A 36mm2	8,450
	CC2C76-8001	CT 800/1A 60mm2	11,230
	CC2C76-12X1	CT 1200/1A 60mm2	11,230
CT SQUARE	CC2N72-1001	CT100/1A	7,730
	CC2N72-2001	CT200/1A	7,730
	CC2N73-4001	CT400/1A	8,450
	CC2N73-5005	CT500/5A	9,790
POWER SUPPLY UNIT	UM2P-A1E		23,690

- Prices are not included VAT
 - Prices are subjected to change without notice

VT and CT For 7.2 kV



Description

Fuji epoxy resin molded type CT and VT, feature excellent water-and damp-proof characteristics. There is no danger of insulation deterioration. Their good thermal and mechanical performance make them suitable for a wide range of applications. While the initial cost of VT and CT are very reasonable.




Features

- Accuracy: Class 1.0
- No corona is produced.
- FUJI's advanced manufacturing techniques eliminate cracking of molded enclosure.
- VT is provided with a current-limiting fuse to give a large interrupting capacity


H.V. Distribution Equipment Instrument transformers

• Types and ratings CT 3.45/6.9 kV

Illustration	Max. Voltage (kV)	Primary/Secondary current	Type	Withstand current (kA/1s)	Unit Price (THB)
 <p>RC15-6C</p>	6.9 (3.45 common use)	(A)			
		5/5	RC15-6 C/5	0.2	6.750
		10/5	RC15-6 C/10	0.4	6.750
		15/5	RC15-6 C/15	0.6	6.750
		20/5	RC15-6 C/20	0.8	6.750
		30/5	RC15-6 C/30	1.2	6.750
		40/5	RC15-6 C/40	1.6	6.750
		50/5	RC15-6 C/50	2	6.750
		60/5	RC15-6 C/60	2.4	6.750
		75/5	RC15-6 C/75	3	6.750
		100/5	RC15-6 C/100	4	6.750
		150/5	RC15-6 C/150	6	6.900
		200/5	RC15-6 C/200	8	6.900
		300/5	RC15-6 C/300	12	6.900
		400/5	RC15-6 C/400	16	8.850
		500/5	RC15-6 C/500	20	8.850
600/5	RC15-6 C/600	24	8.850		
750/5	RC15-6 C/750	30	8.850		

- Rated overcurrent constant (n) :
n > 10 (at burden 10 VA) / n > 5 (at burden 20 VA)
- Rated burden : 40 VA
- Accuracy class 1.0
Insulation level with stand voltage (AC 1min)
Primary : 22kV, Secondary : 2kV
Basic-impulse insulation level : 60kV (full wave)

• Types and ratings VT 3300V- 33000V

Illustration	Primary / Secondary Voltage (V)	Rated burden (VA)	Type	Unit Price (THB)
 <p>CP-624 NPE12</p>	3300/110	50	NPE12-3FA/50	18,750
	6600/110	50	NPE12-6FA/50	18,750
	3300/110	100	NPE12-3FA/100	21,900
	6600/110	100	NPE12-6FA/100	22,950
	3300/110	200	PEC2-3FA/200	29,850
	6600/110	200	PEC2-6FA/200	30,750

- Accuracy class 1.0
 - Insulation level
- NPE12-3FA } BIL 45kV*2, 16kV AC
 PEC2-3FA }
 NPE12-6FA } BIL 60kV, 22kV AC
 PEC2-6FA }

- Prices are not included VAT
- Prices are subjected to change without notice

QHA Series

Protection Relay



High-Voltage Power Receiving and Distribution Protective Relay
 Full model change for static protective relay!
 Digital system makes it possible to set detailed operation



Feature

- Stable protective characteristics achieved through use of digital calculation type
- High reliability achieved through constant monitoring of internal circuit and automatic inspection of output circuit
- Possible to check the operation condition through values such as setting value, operating value, input current value and error code shown on the LED indicator of the front face panel
- Easy setting
- Possible to open and close from either right or left by switching the open/close type cover
- Mounting compatibility with “QH” series

	TYPE	Tripping System	Unit Price (THB)
Over Current Relay	QHA-OC1-ENP	Shunt Trip	12,700
Over Voltage Relay	QHA-OV1-ENP	Shunt Trip	17,800
Under Voltage Relay	QHA-UV1-ENP	Shunt Trip	18,300
Directional	QHA-DG3-ENP	Shunt/Current trip (R)	41,700
Ground Fault Relay	QHA-DG4-ENP	Shunt/Current trip (F)	41,700
Ground Fault Relay	QHA-GR3-ENP	Shunt/Current trip	15,300

- Prices are not included VAT
- Prices are subjected to change without notice

VCB HS Series

VACUUM CIRCUIT BREAKER

3.6 kv - 36 kv



Feature

- Compact, light-mass design

Vacuum circuit breakers have a small switching stroke as compared with other types of circuit breakers, so their breaking unit is small in size. To take full advantage of this feature, the operating mechanism has been designed to reduce the size and mass of the circuit breakers.

- Spring closing system The vacuum circuit breakers use a motor-spring stored-energy mechanism (rapid auto-reclosing type) to provide stabilized electrical and mechanical characteristics and to reduce the closing operating current.

VACUUM CIRCUIT BREAKER

TYPE	Rated Voltage 7.2/3.6kV	Rated Interrupting Current (kA)	Rated Current (A)
HS2006	<input type="checkbox"/> -06Mf-E	20	630
HS2006	<input type="checkbox"/> -12Mf-E	20	1250
HS2006	<input type="checkbox"/> -20Mf-E	20	2000
HS2506	<input type="checkbox"/> -06Mf-E	25	630
HS2506	<input type="checkbox"/> -12Mf-E	25	1250
HS2506	<input type="checkbox"/> -20Mf-E	25	2000
HS3106	<input type="checkbox"/> -12Mf-E	31.5	1250
HS3106	<input type="checkbox"/> -20Mf-E	31.5	2000
HS3106	<input type="checkbox"/> -30Mf-E	31.5	3000
HS4006	<input type="checkbox"/> -12Mf-E	40	1250
HS4006	<input type="checkbox"/> -20Mf-E	40	2000
HS4006	<input type="checkbox"/> -30Mf-E	40	3000
HS4006	<input type="checkbox"/> -40Mf-N	40	4000
HS5006	<input type="checkbox"/> -12Mf-NA	50	1250
HS5006	<input type="checkbox"/> -20Mf-NA	50	2000
HS5006	<input type="checkbox"/> -30Mf-N	50	3000

TYPE	Rated Voltage 24kV	Rated Interrupting Current (kA)	Rated Current (A)
HS1220	<input type="checkbox"/> -06Mf-K	12.5	600
HS1220	<input type="checkbox"/> -12Mf-K	12.5	1200
HS1620	<input type="checkbox"/> -06Mf-E	16	600
HS1620	<input type="checkbox"/> -12Mf-E	16	1250
HS2520	<input type="checkbox"/> -06Mf-E	25	630
HS2520	<input type="checkbox"/> -12Mf-E	25	1250
HS2520	<input type="checkbox"/> -20Mf-E	25	2000
HS4020	<input type="checkbox"/> -12Mf-N	40	1250
HS4020	<input type="checkbox"/> -20Mf-N	40	2000
HS4020	<input type="checkbox"/> -30Mf-N	40	3000

NOTE : : Type of Installation

P : Fixed type

X : Draw-out type with cradle for JEM1425 Class CW

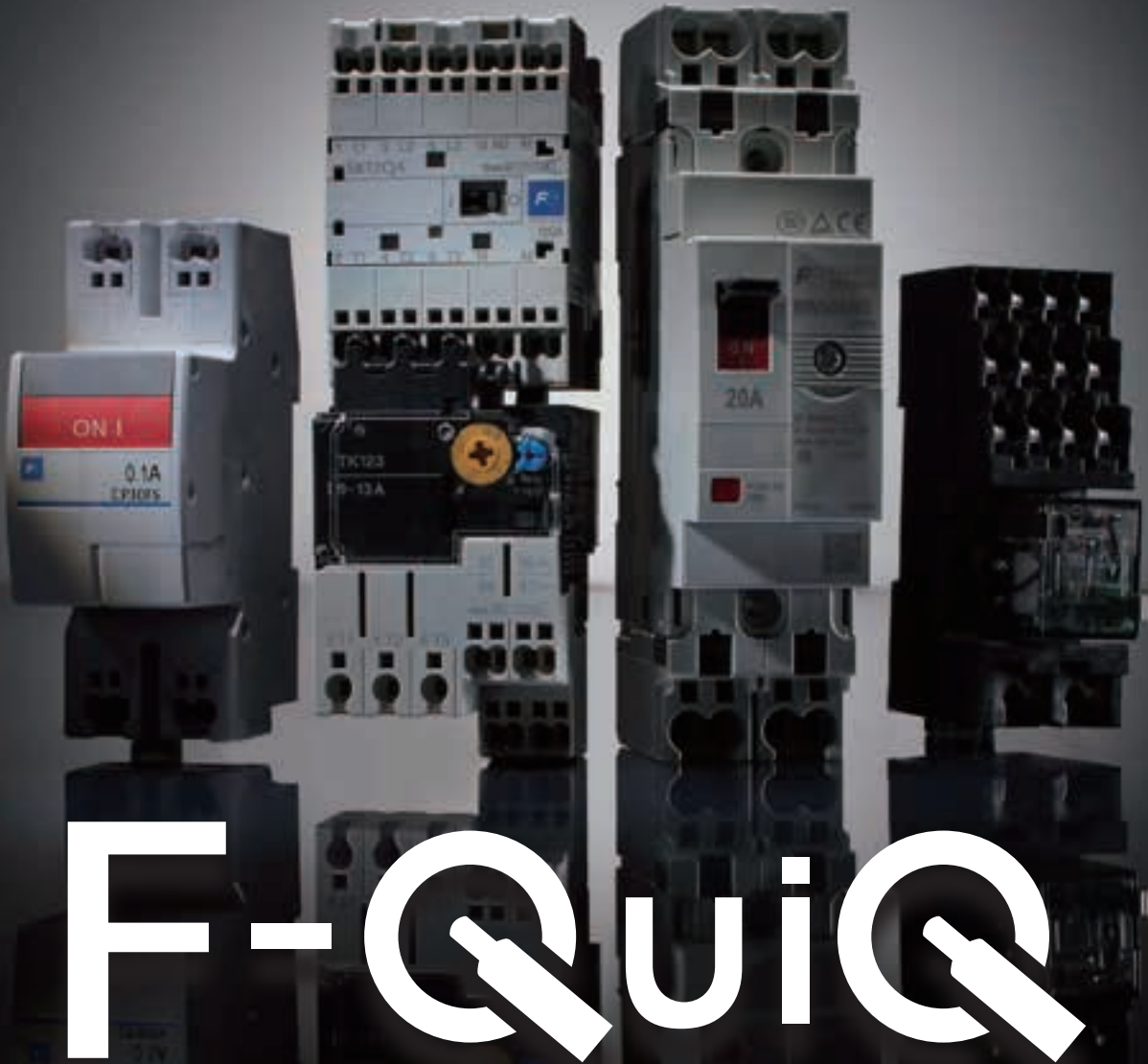
Y : Draw-out type with cradle and shutter for JEM1425 MW, PW

* If you want price of VCB please contact to Fuji Electric (Thailand) Co.,Ltd.

อุปกรณ์ประหยัดต้นทุน

เทอร์มินอลบล็อกแบบสปริง (Spring Type Terminal Block)

ลดระยะเวลาการเดินสายไฟ
ก้าวสู่มาตรฐานของ Control Panel ในปี 2019



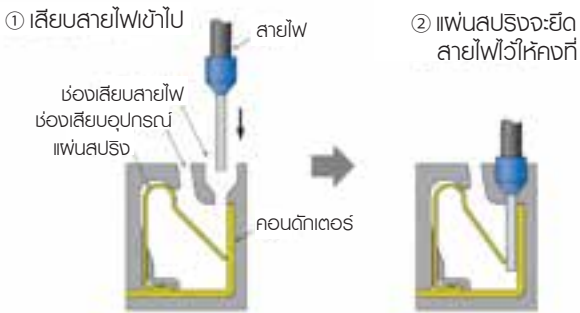
F-Quick

FE Fuji Electric (Thailand) Co., Ltd.

จุดเด่นของเทอร์มินัลแบบสปริง

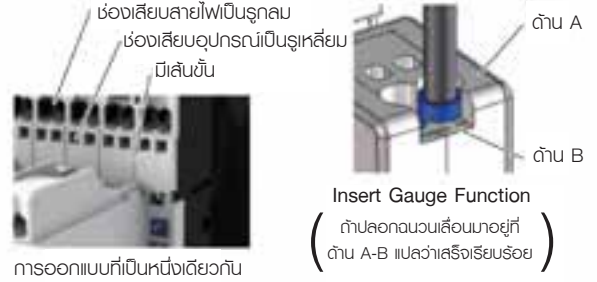
ใช้งานง่าย!

- ใช้รูปแบบ Push-In ทำให้เดินสายเสร็จในขั้นตอนเดียว



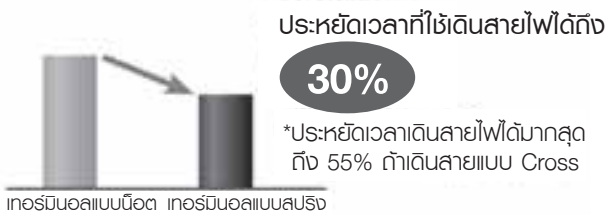
เข้าใจง่าย!

- ออกแบบโดยเน้นความเข้าใจง่าย
- ตรวจสอบด้วยสายตาได้ว่าการติดตั้งสำเร็จหรือไม่ด้วยระบบ Insert Gauge Function



ประหยัดเวลาและต้นทุน!

- ประหยัดเวลาและต้นทุนในการเดินสายไฟและตรวจสอบ



ไม่ต้องอาศัยทักษะ!

- ไม่ต้องใช้เทคนิคการควบคุมการขันน็อต/บิดน็อต
- ประหยัดเวลาในการสอนผู้ใช้งาน

รายการสินค้าที่ใช้เทอร์มินอลบล็อกแบบสปริง (สินค้าวางจำหน่ายปี 2019)



เซอร์ทิคาเบรกเกอร์สำหรับเดินสายไฟ / Earth Leakage Circuit Breaker (ELCB)

Circuit protector

Manual motor starter

Magnetic Contactor / electromagnetic switch

รีเลย์ / Socket สำหรับจับเวลา

*บริษัทขอสงวนสิทธิ์ในการเปลี่ยนแปลงเงื่อนไขหรือ ยกเลิกได้โดยไม่ต้องแจ้งให้ทราบล่วงหน้า

เบรกเกอร์ชนิด ปลั๊ก-อิน บัสบาร์ทวิน ปลั๊ก BV • EV สำหรับ ระบบจ่ายกำลังไฟฟ้า ระยะห่าง 70 มิลลิเมตร ประหยัดและปลอดภัยมากยิ่งขึ้น!



ลดส่วนประกอบของสายไฟ

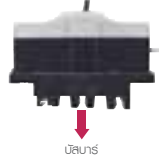
Reduced Wiring components

เบรกเกอร์ชนิด ปลีก-อิน
บัสบาร์ทวิน ปลีก BV* EV ระยะห่าง 70 มิลลิเมตร
สะดวกในการนำไปใช้งานมากขึ้น!

NEW

เพิ่มประสิทธิภาพด้านความปลอดภัย

ปรับปรุงในเรื่องความปลอดภัย ชนิด ปลีก-อิน ภาระจะลดลง ลดภาระการติดตั้ง 50% ของโหลด ชนิด ปลีก-อิน เป็น 400-630AF แทนที่ต้องใช้ ปลีก-อิน ขนาดใหญ่



NEW!
 ลดภาระติดตั้ง 50% ของโหลด ชนิด ปลีก-อิน



ลดระยะเวลาในการติดตั้ง

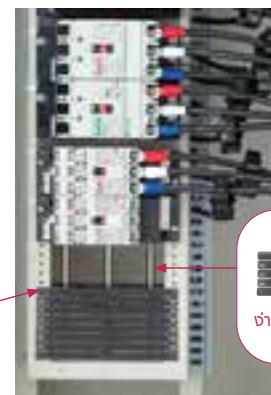
แผงปิดช่องว่างที่ไม่ต้องขันน็อต เพียงติดตั้งด้วยตัว กด-ล็อก ที่ปิดช่องว่างโดยไปใช้สกรู ทำให้ร่นเวลาในการต่อใช้งานและไม่มีสกรูตกหล่น



1 สามารถที่จะแยกออก ขึ้นต่อก็ได้!

blank cover

NEW!
 มีความปลอดภัยโดยไม่มีสกรูที่ตกจากโหละ!
 ตัวกด-ล็อก สามารถใส่แผงปิดช่องว่างเพียงกดเท่านั้น



ช่องต่อการแยกบัสบาร์

สามารถติดตั้งแทนผลิตภัณฑ์เดิมได้อย่างสมบูรณ์แบบ

ผลิตภัณฑ์ที่เกี่ยวข้อง

ปลีกเบรกเกอร์บัสบาร์

ชุด TWIN Plug BV
 บอร์ดจำหน่ายเซิร์ฟเวอร์ขนาด 30 มม
 ประเภทสนาม



ประเภทการบล็อกสูง



ประเภทการบล็อกต่ำ

เบรกเกอร์ประเภทซีโอก็เกิด

ชุด G - TWIN λ (lambda)
 ประเภทปลีกอินสำหรับเซิร์ฟเวอร์แบบกระจาย



Coming Soon

Medium-Voltage Power-Receiving

F-MPC60G Series

Improved Visibility and Operability via Color LCD Completely Compliant with the IEC Standards

Adoption of Color LCD

Improves visibility and operability. Operating status displayed in color.

Compared with previous model

Previous (F-MPC60B)	F-MPC60G
<p>Frequency Current Voltage</p>	<p>Meter</p>

Until now screens needed to be switched. **Display on one screen**



Color LCD achieves various displays (eg.)

Equipped with Waveform Recording Function for System Failure

Incorporated a function for recording failure waveforms during protective operation or failure. Thanks to calendar and clock functions (NEW), possible to finding, investigating and/or countermeasures any cause of failure.



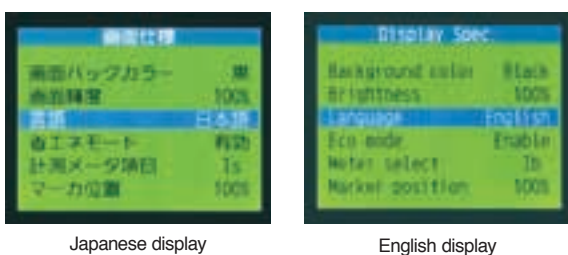
Includes a Vector Display Function

Possible to check the state of phase angle and/or of wiring connection when installation or maintenance.



Supports Display Language Switching

English and Japanese display are available by switching.

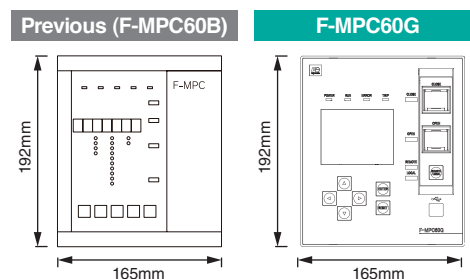


Japanese display

English display

Maintains Compatibility with Old and New Models

Succeed to some function of previous models such as same dimension, same terminal block, communication and CPU duplication, you can use this model without any adjustment of configurations.



Fuji Electric (Thailand) Co., Ltd.

KPNE1708

Protecting elements

Unit	Grounding method	Basic type	Protection																		
			50	51 Inverse time limit	51DT Time limit	51DT2 Time limit	50G	51G Inverse time limit	OCGA Zero-phase current pre-alarm	67 DG	67DG/51G Selection Time limit	DGA	DGA/OCGA Selection Time limit	64 OVG	27 UV	27 UV2	59 OV	47 Phase reversal	46 Open-phase	OCA Overcurrent pre-alarm	VR Voltage establishment
Power receiving	Ungrounded	UM62FP UM62FQ	●	●	●	●				●		●	●	●	●	●	●	●	●	●	
Feeder	Ungrounded	UM62CP UM62CQ	●	●	●	●				●		●		●	●	●	●	●	●	●	
Power receiving	Resistance grounding	UM63FN	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	
Busbar		UM62BN												●	●	●	●				●

Note 1) The feeder unit 67DG can be used in combination with a power receiving or busbar unit. (MN signal)

General Specifications

Item	Specification	
Control power supply	100 V DC (80 to 143 V DC), 100 V AC (85 V to 132 V AC)	
Power consumption	DC input 15 W, AC input 20 VA or less	
Dropout tolerance	20 ms (Continuous operation)	
Rated frequency	50/60 Hz (Setting selection)	
DC input	Rated	Primary: 10 to 7500 A AC (Step: 5 to 100 A [5A], 110 to 1000 A [10 A], 1050 to 7500 A [50 A]) Secondary: 5 A / 1 A AC (Specified at the time of ordering)
	Withstand capability	Continuous: 4-fold (20 A / 4 A), Short time: 40-fold (200 A / 40 A), 1 s interval
	Rated load	1.0 VA or less
Voltage input	Rated	Primary: 210 to 110000 V AC (Step 10 V) Secondary: 100, 110, 120 V AC (Step 10 V)
	Overvoltage tolerance	Short time: 150 V × 1.25 times 187.5 V 10 s
	Rated load	1.0 VA or less
Zero-phase voltage input	Rated	EVT tertiary: 110 V / 190 V AC (Setting switchable) ZVT (Exclusive product): Primary side 3810 V (Type: ZPD-1 or ZPD-2)
	Overvoltage tolerance	Short time: 190 V × 1.5 times 285 V 5 s
Zero-phase current	Load	1.0 VA or less
	CT rating	5 A / 1 A AC Specified at the time of ordering (Same time as phase current) Settable to tertiary CT primary rated 5 to 400 A (Step: 5 to 100 A [5 A], 110 to 400 A [10 A])
	Withstand capability	Continuous: 4-fold (20 A / 4 A), Short time: 40-fold (200 A / 40 A), 1 s interval
	Load	1.0 VA or less
ZCT rating	200 mA / 1.5 mA AC (JEC-1201 items)	
Structure	Front IP40, back IP20, terminal wiring IP10	
Ambient temperature	Working guarantee: -10°C to 60°C (No condensation or freezing) Note* Characteristic guarantee: 0 to 40°C	
Working atmosphere	No corrosive gas or excessive dust.	
Altitude	2000 m or less	
Mass	1.7 kg	
Conformed standard	JEC-2500-2010: Protective relays for electrical power systems JEC-2501-2010: Electromagnetic compatibility test for the protective relay JEC-2518-2015: Digital overcurrent relay IEC-60255 Series: Measuring relays and protection equipment	

Note (1) When using Protection 27 (UV) via a control power supply, AC power supply at a time other than instantaneous operation (operation time 0 s setting), use in combination with an uninterruptible power supply or an F-MPC use AC power supply (Type: UM2P-A1 optional).

Note (2) EVT/ZVT selection is possible via connection terminal switching. Furthermore, an EVT rated voltage of 110 V / 190 V is configurable.

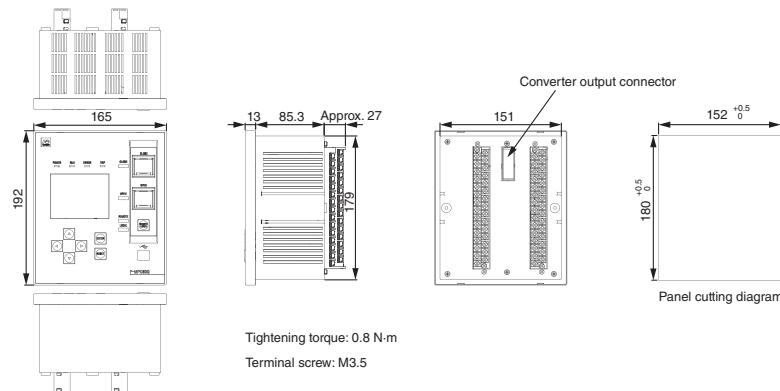
Note* The working guarantee temperature is the temperature that guarantees operation within 2 times the guarantee precision value at JEC characteristic guarantee temperature and within influence precision of the JIS temperature.

Protective relay specification

Item	Voltage/current operation value setting range	Operation time (timer) setting range	Characteristic	
			Operation value	Operation time
50 (instantaneous)	CT secondary rated current 1.0 to 16.0 times, LOCK	(Fixed)	±5%	40 ms or less
51DT (short time limit)	CT secondary rated current 0.2 to 16.0 times, LOCK	0, 0.05 to 5.00 s	±5%	±5% (lower limit ±50 ms)
51DT2 (short time limit)	CT secondary rated current 20 to 1000%, LOCK	0, 0.05 to 10.00 s	±5%	±5% (lower limit ±50 ms)
51 (inverse time limit)	CT secondary rated current 20 to 240%, LOCK	Time magnification 0.2 to 20.0 times	±5%	Setting value 300%: ±12% Setting value 500%: ±7% Setting value 1000%: ±5%
OCA (overcurrent pre-alarm)	10 to 100% rated, LOCK	10 to 200 s	±10%	±5%
50G (instantaneous, short time limit)	0.1 to 8.0 times rated, LOCK	0.0 to 180.0 s	±5%	±5% (lower limit ±50 ms)
51G (Inverse time limit selection)	0.02 to 1.00 times rated, LOCK	Time magnification 0.5 to 50.0 times	±5%	Setting value 300%: ±12% Setting value 500%: ±7% Setting value 1000%: ±5%
	0.02 to 1.00 times rated, LOCK	0.10 to 600.00 s	±5%	±5%
OCGA (zero-phase current pre-alarm)	51G operating current setting value 50 to 100%, LOCK	0.10 to 600.00 s	±10%	±5%
59 (OV)	VT secondary: 110 to 150 V, LOCK	0.0 to 60.0 s	±5%	±5%
27 (UV)	VT secondary: 20 to 100 V 52a coordination on20-on100 V, LOCK	0.0 to 60.0 s	±5%	±5%
27-2 (UV2)	VT secondary: 20 to 100 V, LOCK	0.0 to 60.0 s	±5%	±5%
64 (OVG)	2.5 to 40.0% rated, LOCK	0.0 to 120.0 s	Note 1	±5%
67DG	Zero-phase voltage: 2.5 to 40.0% rated Zero-phase current: 0.02 to 1.00 times rated Maximum sensitivity phase angle: 0° (fixed) Operation phase angle range: ±80°	0.10 to 600.00 s	Note 1 ±5% ±12.5°	±5%
	67DG / 51G	Zero-phase voltage: 2.5 to 40.0% rated Zero-phase current: 0.10 to 1.00 A / 1.0 to 10.0 A rated Maximum sensitivity phase angle: 20, 30, 45, 60° Operation phase angle range: ±80°	Note 1 ±10% ±12.5°	±5%
DGA	Zero-phase voltage: 2.5 to 40.0% rated Zero-phase current: DG operating current setting value 50 to 100%, LOCK Maximum sensitivity phase angle: Same as DG	0.10 to 600.00 s	Note 1 ±10% ±12.5°	±5%
DGA/OCGA	Zero-phase voltage: 2.5 to 40.0% rated Zero-phase current: DG operating current setting value 50 to 100%, LOCK Maximum sensitivity phase angle: Same as DG	0.10 to 600.00 s	Note 1 ±10% ±12.5°	±5%
Open-phase	—	—	Unbalance rate 50 to 80% or more	2 s ±1 s
Phase reversal	—	—	—	0.5 s or less
VR (voltage establishment)	VT secondary: 10 to 110 V, LOCK	0.10 to 60.00 s	±5%	±5%

Note (1) At time of EVT combination (Not including EVT tolerance): Equivalent to JEC-2511 5 V class (Formula: $2.3\% + \{(\text{Setting value}) / (\text{Voltage setting value})\} \times 0.16\} \times 2$) ZVT combination time: ±25%

Dimensions (mm)



Sales / Technical support data

Product selection App.

- MMS and MCCBs Selection App. (Open) To selection the over-current protection devices for the motor starter circuit.
- CTT Selection App. (SC●SK) (Open) To calculate the contact life expectancy for each load condition.



available for smart phone ➤



MS Scale



MCLifeCurve_SC



MCLifeCurve_SK

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