Contactors (18AF)

Description

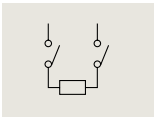
- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- AC or DC control in different physical size
- Front/side mountable accessories available
- Direct mountable overload relay available Rating
- 1NO or 1NC Auxiliary contact built-in as standard.
- Degree of protection: IP20



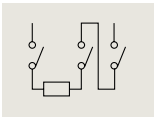
MC-18a

Rating

Contactor type			MC-6a		MC-9a		MC-12a		MC-18a	
			kW	A	kW	A	kW	A	kW	A
AC duty	AC3	200/240V	2.2	9	2.5	11	3.5	13	4.5	18
		380/440V	3	7	4	9	5.5	12	7.5	18
		500/550V	3	6	4	7	7.5	12	7.5	13
		690V	3	4	4	5	7.5	9	7.5	9
	AC4	200/240V	1.5	7	1.5	8	2.2	11	3.7	16
		380/440V	2.2	5	2.2	6	4	9	4	11
	AC1		-	25	-	25	-	25	-	32
DC1 duty	2-pole	24V	-	10	-	10	-	12	-	18
(L/R=1ms)	in series	48V	-	10	-	10	-	12	-	18
		110V	-	6	-	6	-	10	-	13
	3-pole	24V	-	10	-	10	-	12	-	18
	in series	48V	-	10	-	10	-	12	-	18
		110V	-	8	-	8	-	12	-	18
DC3, 4 duty	2-pole	24V	-	8	-	8	-	12	-	12
(L/R=15ms)	in series	48V	-	4	-	4	-	6	-	6
		110V	-	2.5	-	2.5	-	4	-	4
	3-pole	24V	-	8	-	8	-	12	-	12
	in series	48V	-	6	-	6	-	10	-	10
		110V	-	4	-	4	-	8	-	8
Directly mountable Overload relay			MT-12							
Conductor size (solid, stranded)		AWG	18~10		16~10		16~8		14~8	
(the max. number of conducts: 2)		mm^2	1~4		1.5~4		1.5~10		2.5~10	
Conductor type			65/75℃ Cu-wire only							



2pole for DC contact



3pole for DC contact

Coil voltage

AC	50Hz	24, 32, 36, 42, 48, 80, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440, 500, 550V
	60Hz	24, 48, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V
DC	DC	12, 20, 24, 30, 48, 60, 80, 100, 110, 125, 200, 220, 250V

* Please be cautious for wiring control power cable, especially " + " (Positive) and " - " (Negative) polarity should be correctly considered.

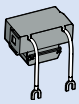
Certification

- •CE(IEC)
- •UL508
- •CCC

Accessories

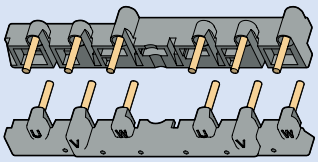


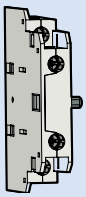
Delayed opening device, AD-9



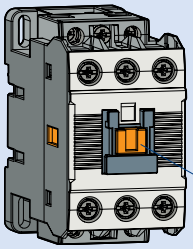
Surge unit, US
connecting to coil terminals

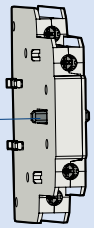
Wire kit, UW
for use with Interlock unit



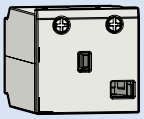


Auxiliary contact unit, UA-1
side mount, 1NO+1NC

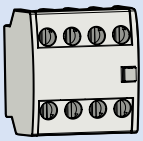




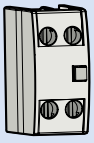
Interlock unit, UR
side mount



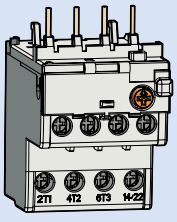
Mechanical latch unit, ML-65



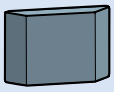
Auxiliary contact unit, UA-4
front mount, 4P



Auxiliary contact unit, UA-2
front mount, 2P



Overload relay, MT
directly mountable to MC type contactor



Safety cover, A7

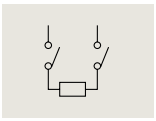
Contactors (22AF)

Description

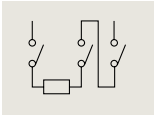
- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- AC or DC control in different physical size
- Front/side mountable accessories available
- Direct mountable overload relay available Rating
- 1NO1NC Auxiliary contact built-in as standard.
- UA-1 is available on only left side
- Degree of protection: IP20



MC-22b



2pole for DC contact



3pole for DC contact

Rating

Contactor type			MC-9b		MC-12b		MC-18b		MC-22b	
			kW	A	kW	A	kW	A	kW	A
AC duty	AC3	200/240V	2.5	11	3.5	13	4.5	18	5.5	22
		380/440V	4	9	5.5	12	7.5	18	11	22
		500/550V	4	7	7.5	12	7.5	13	15	20
		690V	4	6	7.5	9	7.5	9	15	18
	AC4	200/240V	1.5	8	2.2	11	3.7	16	3.7	18
		380/440V	2.2	6	4	9	4	11	5.5	13
	AC1		-	25	-	27	-	40	-	45
DC1 duty	2-pole	24V	-	10	-	12	-	18	-	20
(L/R=1ms)	in series	48V	-	10	-	12	-	18	-	20
		110V	-	6	-	10	-	13	-	15
	3-pole	24V	-	10	-	12	-	18	-	20
	in series	48V	-	10	-	12	-	18	-	20
		110V	-	8	-	12	-	18	-	20
DC3,4 duty	2-pole	24V	-	8	-	12	-	12	-	20
(L/R=15ms)	in series	48V	-	4	-	6	-	6	-	15
		110V	-	2.5	-	4	-	4	-	8
	3-pole	24V	-	8	-	12	-	12	-	20
	in series	48V	-	6	-	10	-	10	-	20
		110V	-	4	-	8		8	-	15
Directly mountable Overload relay			MT-32							
Conductor size (solid, stranded)		AWG	16~10		16~8		14~8		14~8	
(the max. number of conducts: 2)		mm^2	1.5~4		1.5~10		2.5~10		2.5~10	
Conductor type			65/75℃ Cu-wire only							

Coil voltage

AC	50Hz	24, 32, 36, 42, 48, 80, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440, 500, 550V
	60Hz	24, 48, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V
DC	DC	12, 20, 24, 30, 48, 60, 80, 100, 110, 125, 200, 220, 250V

* Please be cautious for wiring control power cable, especially " + " (Positive) and " - " (Negative) polarity should be correctly considered.

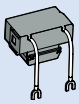
Certification

- CE(IEC)
- UL508
- CCC

Accessories

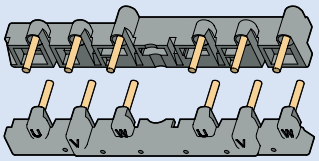


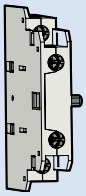
Delayed opening device, AD-9



Surge unit, US
connecting to coil terminals

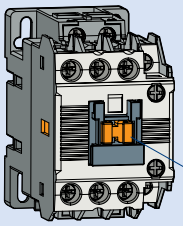
Wire kit, UW
for use with Interlock unit

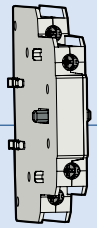




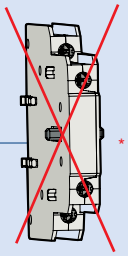
Auxiliary contact unit, UA-1
side mount, 1NO+1NC

* UA-1 auxiliary contact can not be attached to the right side of 22AF product

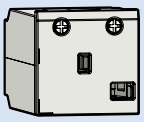




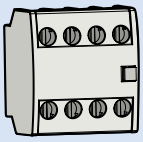
Interlock unit, UR
side mount



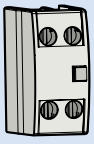
* UA-1 auxiliary contact can not be attached on the right side



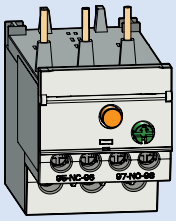
Mechanical latch unit, ML-65



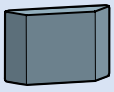
Auxiliary contact unit, UA-4
front mount, 4P



Auxiliary contact unit, UA-2
front mount, 2P



Overload relay, MT
directly mountable to MC type contactor



Safety cover, A7

Contactors (40AF)

Description

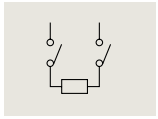
- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- AC or DC control in different physical size
- Front/side mountable accessories available
- Direct mountable overload relay available Rating
- 2NO2NC Auxiliary contact built-in is possible as standard
- Degree of protection: IP20



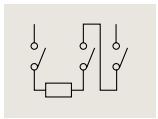
MC-40a

Rating

Contactor type			MC-32a		MC-40a	
			kW	A	kW	A
AC duty	AC3	200/240V	7.5	32	11	40
		380/440V	15	32	18.5	40
		500/550V	18.5	28	22	32
		690V	18.5	20	22	23
		1000V	22	17	22	17
	AC4	200/240V	4.5	20	5.5	25
		380/440V	7.5	17	11	24
	AC1		-	55	-	60
DC1	2-pole	24V	-	25	-	35
(L/R=1ms)	in series	48V	-	25	-	35
		110V	-	25	-	25
	3-pole	24V	-	25	-	35
	in series	48V	-	25	-	35
		110V	-	25	-	35
DC3,4	2-pole	24V	-	25	-	35
(L/R=15ms)	in series	48V	-	20	-	20
		110V	-	10	-	10
	3-pole	24V	-	25	-	35
	in series	48V	-	25	-	30
		110V	-	20	-	20
Directly mountable Overload relay			MT-32			
Conductor size (solid, stranded)		AWG	12~8		8~6	
(the max. number of conducts: 2)		mm^2	2.5~10		10~16	
Conductor type			65/75℃ Cu-wire only			



2pole for DC contact



3pole for DC contact

Coil voltage

AC	50Hz	24, 32, 36, 42, 48, 80, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440, 500, 550V
	60Hz	24, 48, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V
DC	DC	12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

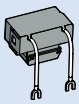
Certification

- •CE(IEC)
- •UL508
- •CCC

Accessories

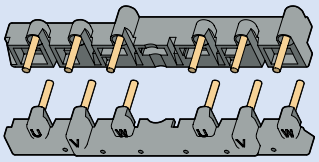


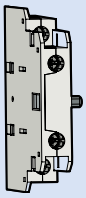
Delayed opening device, AD-32



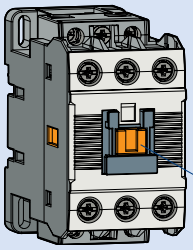
Surge unit, US
connecting to coil terminals

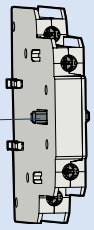
Wire kit, UW
for use with Interlock unit



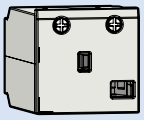


Auxiliary contact unit, UA-1
side mount, 1NO+1NC

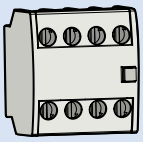




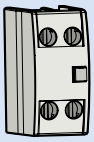
Interlock unit, UR
side mount



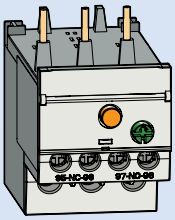
Mechanical latch unit, ML-65



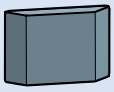
Auxiliary contact unit, UA-4
front mount, 4P



Auxiliary contact unit, UA-2
front mount, 2P



Overload relay, MT
directly mountable to MC type contactor



Safety cover, A7

Contactors (65AF)

Description

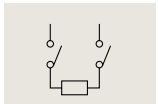
- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- Both screw and Box terminal (lug) type are available
- AC or DC control in different physical size
- Front/side mountable accessories available
- Direct mountable overload relay available rating
- 2NO2NC Auxiliary contact built-in is possible as standard
- Degree of protection: IP20



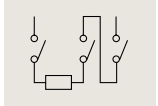
MC-65a

Rating

Contactor type			MC-50a		MC-65a	
			kW	A	kW	A
AC duty	AC3	200/240V	15	55	18.5	65
		380/440V	22	50	30	65
		500/550V	30	43	33	60
		690V	30	28	33	35
		1000V	30	23	30	23
	AC4	200/240V	7.5	35	11	50
		380/440V	15	32	22	47
	AC1		-	100	-	115
DC1 duty	2-pole	24V	-	50	-	50
(L/R=1ms)	in series	48V	-	40	-	40
		110V	-	35	-	35
	3-pole	24V	-	50	-	65
	in series	48V	-	50	-	65
		110V	-	50	-	65
DC3, 4 duty	2-pole	24V	-	45	-	45
(L/R=15ms)	in series	48V	-	25	-	25
		110V	-	15	-	15
	3-pole	24V	-	50	-	50
	in series	48V	-	35	-	35
		110V	-	30	-	30
Directly mountable Overload relay			MT-63			
Conductor size (solid, stranded)		AWG	10~4		8~3	
(the max. number of conducts: 2)		mm^2	6~25		10~35	
Conductor type			65/75℃ Cu-wire only			



2pole for DC contact



3pole for DC contact



Coil voltage

AC	50Hz	24, 32, 36, 42, 48, 80, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440, 500, 550V
	60Hz	24, 48, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V
DC	DC	12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

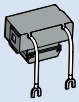
Certification

- •CE(IEC)
- •UL508
- •CCC

Accessories

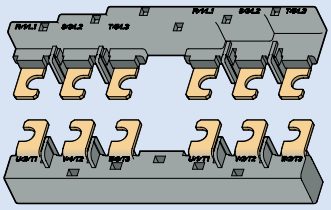


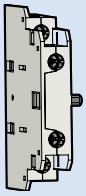
Delayed opening device, AD-50



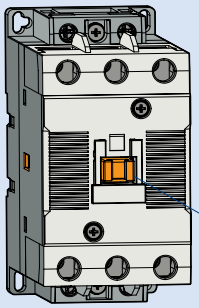
Surge unit, US
connecting to coil terminals

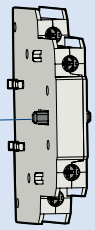
Wire kit, UW
for use with Interlock unit



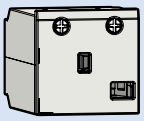


Auxiliary contact unit, UA-1
side mount, 1NO+1NC

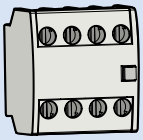




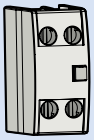
Interlock unit, UR
side mount



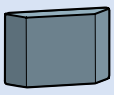
Mechanical latch unit, ML-65



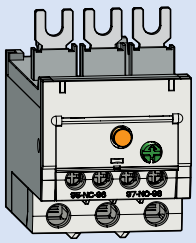
Auxiliary contact unit, UA-4
front mount, 4P



Auxiliary contact unit, UA-2
front mount, 2P



Safety cover, A7



Overload relay, MT
directly mountable to MC type contactor

Contactors (100AF)

Description

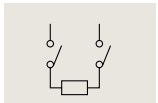
- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- Both screw and Box terminal (lug) type are available
- AC or DC control in different physical size
- Front/side mountable accessories available
- Direct mountable overload relay available Rating
- 2NO2NC Auxiliary contact built-in is possible as standard
- Degree of protection: IP20



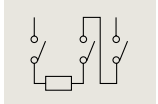
MC-100a

Rating

Contactor type			MC-75a		MC-85a		MC-100a	
			kW	A	kW	A	kW	A
AC duty	AC3	200/240V	22	75	25	85	30	105
		380/440V	37	75	45	85	55	105
		500/550V	37	64	45	75	55	85
		690V	37	42	45	45	45	65
		1000V	37	28	37	28	37	28
	AC4	200/240V	13	55	15	65	19	80
		380/440V	25	52	30	62	37	75
	AC1		-	125	-	135	-	160
DC1 duty (L/R=1ms)	2-pole in series	24V	-	75	-	80	-	100
		48V	-	65	-	65	-	100
		110V	-	50	-	50	-	80
	3-pole in series	24V	-	75	-	80	-	100
		48V	-	75	-	80	-	100
		110V	-	75	-	80	-	100
DC3, 4 duty (L/R=15ms)	2-pole in series	24V	-	65	-	65	-	100
		48V	-	40	-	40	-	60
		110V	-	20	-	20	-	40
	3-pole in series	24V	-	80	-	80	-	100
		48V	-	60	-	60	-	90
		110V	-	50	-	50	-	80
Directly mountable Overload relay			MT-95					
Conductor size (solid, stranded)		AWG	8~2		8~0		8~00	
(the max. number of conducts: 2)		mm²	10~35		10~50		10~70	
Conductor type			65/75℃ Cu-wire only					



2pole for DC contact



3pole for DC contact

Coil voltage

AC	50Hz	24, 32, 36, 42, 48, 80, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440, 500, 550V
	60Hz	24, 48, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V
DC	DC	12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

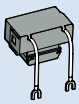
Certification

- •CE(IEC)
- •UL508
- •CCC

Accessories

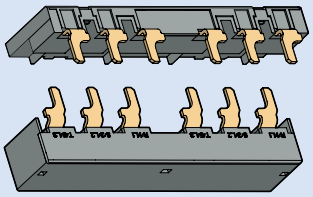


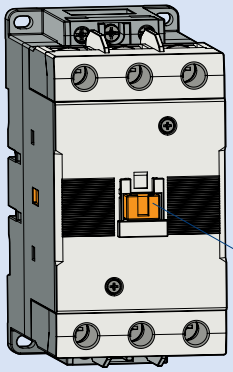
Delayed opening device, AD-50

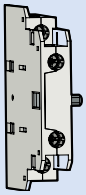


Surge unit, US
connecting to coil terminals

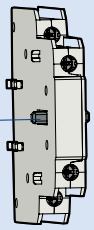
Wire kit, UW
for use with Interlock unit



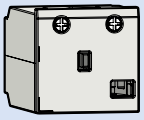




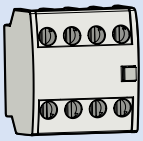
Auxiliary contact unit, UA-1
side mount, 1NO+1NC



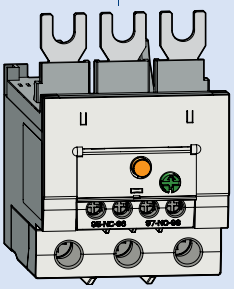
Interlock unit, UR
side mount



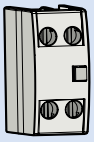
Mechanical latch unit, ML-150



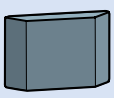
Auxiliary contact unit, UA-4
front mount, 4P



Overload relay, MT
directly mountable to MC type contactor



Auxiliary contact unit, UA-2
front mount, 2P



Safety cover, A7

Contactors (150AF)

Description

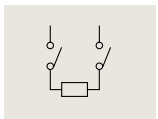
- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- Both screw and Box terminal (lug) type are available
- AC or DC control in the same physical size
- Front/side mountable accessories available
- Direct mountable overload relay available
- 2NO2NC Auxiliary contact built-in is possible as standard
- Degree of protection: IP20



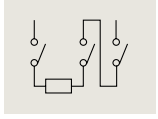
MC-150a

Rating

Contactor type			MC-130a		MC-150a	
			kW	A	kW	A
AC duty	AC3	200/240V	37	130	45	150
		380/440V	60	130	75	150
		500/550V	60	90	70	100
		690V	55	60	55	60
		1000V	75	50	75	50
	AC4	200/240V	22	93	30	120
		380/440V	45	90	55	110
	AC1		-	200	-	250
DC1 duty	2-pole	24V	-	120	-	150
(L/R=1ms)	in series	48V	-	100	-	120
		110V	-	80	-	100
	3-pole	24V	-	120	-	150
	in series	48V	-	120	-	150
		110V	-	100	-	150
DC3,4 duty	2-pole	24V	-	120	-	150
(L/R=15ms)	in series	48V	-	60	-	100
		110V	-	40	-	80
	3-pole	24V	-	120	-	150
	in series	48V	-	90	-	130
		110V	-	80	-	120
Directly mountable Overload relay			MT-150			
Conductor size (solid, stranded)		AWG	3~00		3~4/0	
(the max. number of conducts: 2)		mm^2	35~70		35~95	
Conductor type			65/75℃ Cu-wire only			



2pole for DC contact



3pole for DC contact



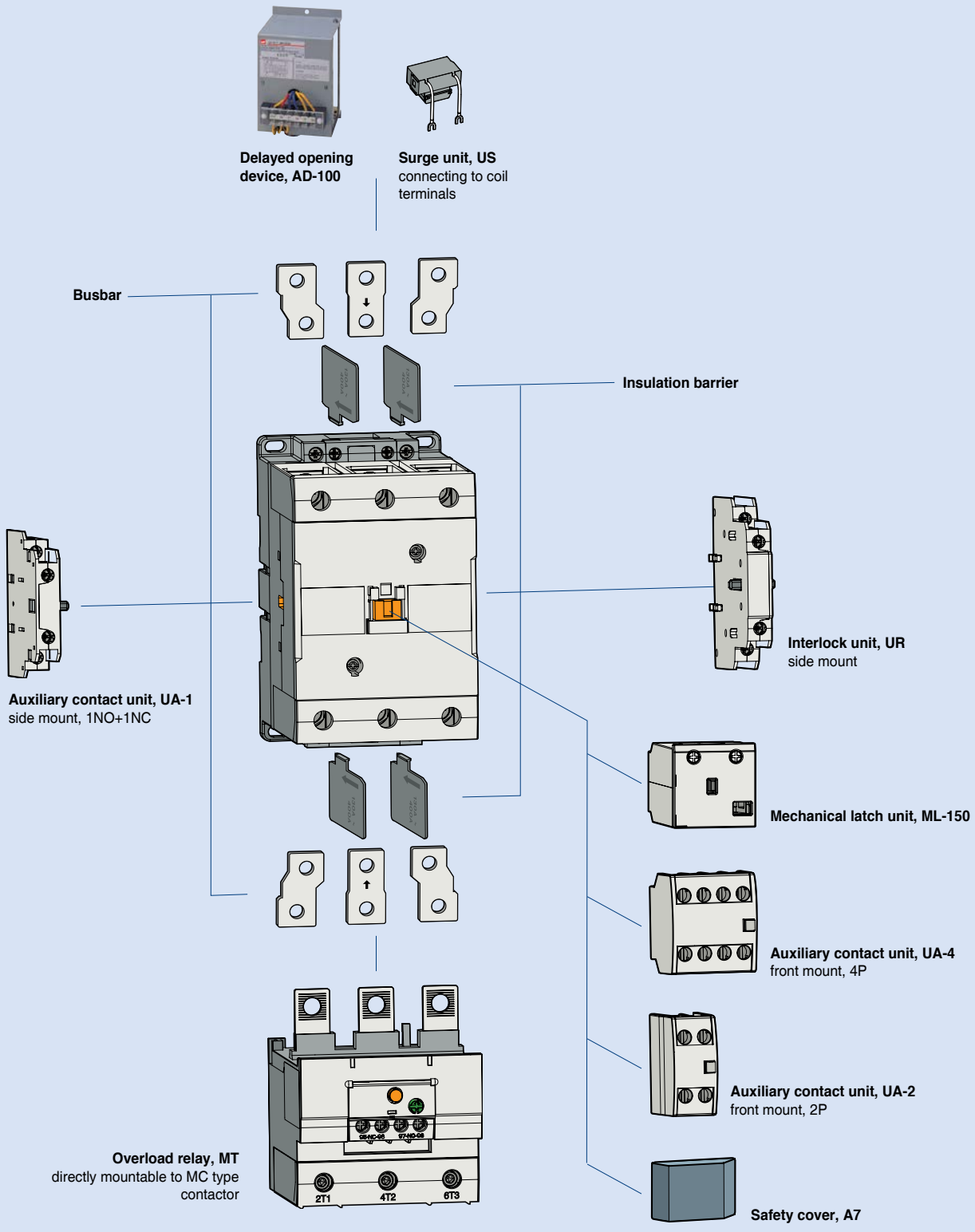
Coil voltage

AC/DC		100~240 / 100~220 / 24~48
AC	50/60Hz	24, 48, 100~240, 110~120, 220~240, 300, 380~440, 500V
DC	DC	24, 48, 70~110, 100~220, 110, 220V

Certification

- •CE(IEC)
- •UL508
- •CCC

Accessories



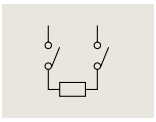
Contactors (225AF)

Description

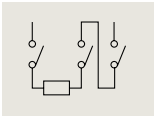
- 3-pole main contact
- AC/DC common use coil built
- Wide coil operation voltage
- Screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- Top/side mountable accessories available
- Direct mountable overload relays available
- Degree of protection: IP00



MC-225a



2pole for DC contact



3pole for DC contact

Rating

Contactor type			MC-185a		MC-225a	
			kW	A	kW	A
AC duty	AC3	200/240V	55	185	75	225
		380/440V	90	185	132	225
		500/550V	110	180	132	200
		690V	110	120	140	150
		1000V	132	90	132	90
	AC4	200/240V	37	150	45	180
		380/440V	75	150	90	180
	AC1		-	300	-	350
DC1 duty	2-pole	24V	-	180	-	220
(L/R=1ms)	in series	48V	-	180	-	180
		110V	-	150	-	150
	3-pole	24V	-	180	-	220
	in series	48V	-	180	-	220
		110V	-	180	-	220
DC3, 4 duty	2-pole	24V	-	180	-	220
(L/R=15ms)	in series	48V	-	150	-	150
		110V	-	120	-	120
	3-pole	24V	-	180	-	220
	in series	48V	-	180	-	220
		110V	-	150	-	150
Directly mountable Overload relay			MT-225			
Conductor size (solid, stranded)		AWG	1~4/0		0~300	
(the max. number of conducts: 2)		mm^2	50~95		50~150	
Conductor type			75℃ Cu stranded wire			



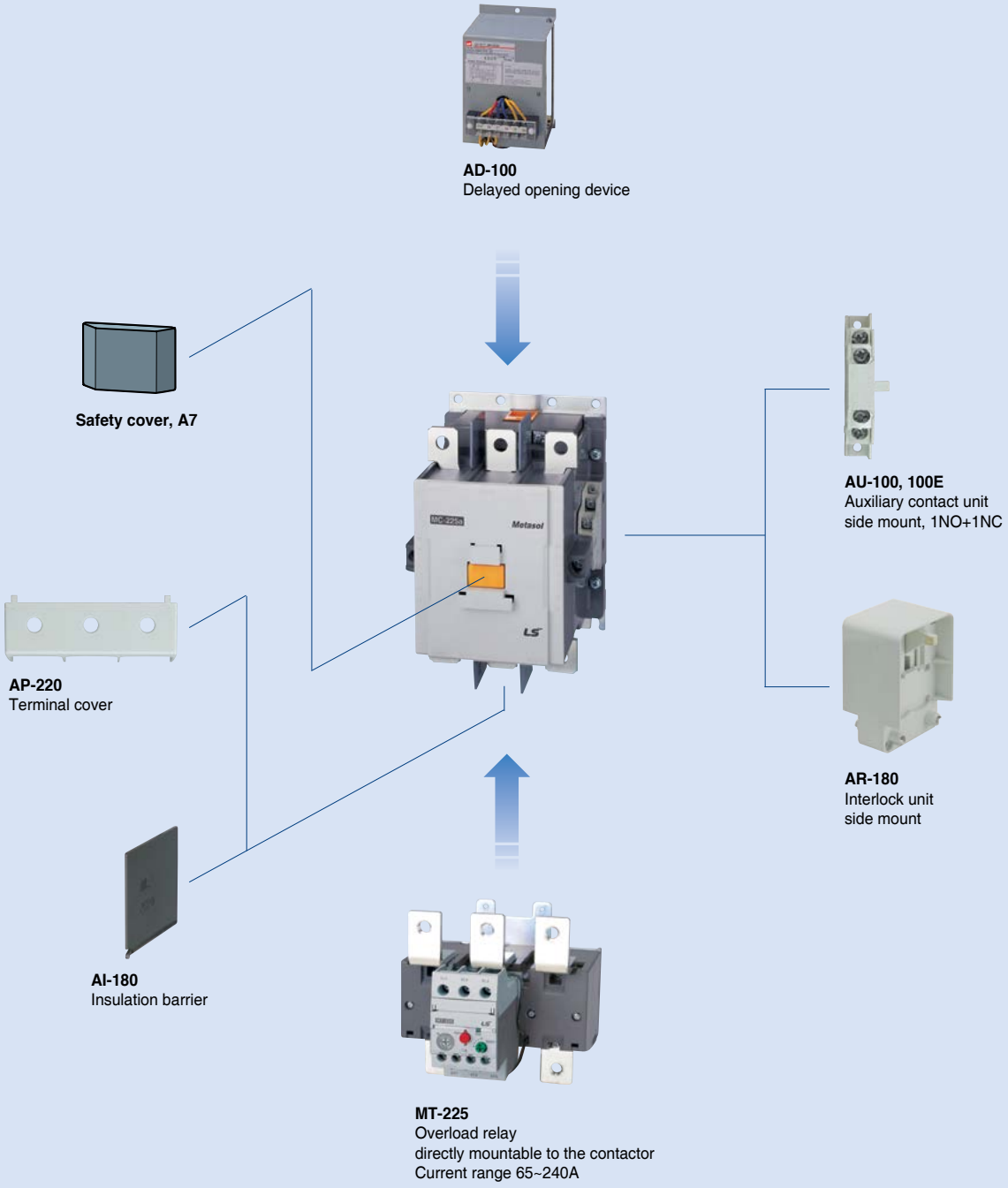
Coil voltage, AC/DC common

Nominal(ordering) voltage	AC 50/60Hz	DC
24V	24 - 25V	24V
48V	48 - 50V	48V
100/200V	100 - 240V	100 - 220V
300V	265 - 347V	-
400V	380 - 450V	-
500V	440 - 575V	-

Certification

- CE(IEC)
- UL508
- CCC

Accessories



Contactors (400AF)

Description

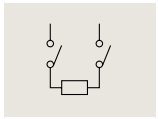
- 3-pole main contact
- AC/DC common use coil built
- Wide coil operation voltage
- Screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- Top/side mountable accessories available
- Direct mountable overload relays available
- Degree of protection: IP00



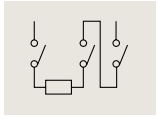
MC-400a

Rating

Contactor type			MC-265a		MC-330a		MC-400a	
			kW	A	kW	A	kW	A
AC duty	AC3	200/240V	80	265	90	330	125	400
		380/440V	147	265	160	330	200	400
		500/550V	147	225	160	280	225	350
		690V	160	185	200	220	250	300
		1000V	147	105	147	105	147	105
	AC4	200/240V	50	200	55	220	75	300
		380/440V	102	200	110	220	150	300
	AC1		-	400	-	500	-	520
DC1 duty	2-pole	24V	-	220	-	300	-	400
(L/R=1ms)	in series	48V	-	180	-	240	-	240
		110V	-	150	-	200	-	200
	3-pole	24V	-	220	-	300	-	400
	in series	48V	-	220	-	300	-	400
		110V	-	220	-	300	-	400
DC3, 4 duty	2-pole	24V	-	220	-	300	-	400
(L/R=15ms)	in series	48V	-	150	-	200	-	200
		110V	-	120	-	150	-	150
	3-pole	24V	-	220	-	300	-	400
	in series	48V	-	220	-	280	-	280
		110V	-	150	-	200	-	200
Directly mountable Overload relay			MT-400					
Conductor size (solid, stranded)		AWG	3/0~500		4/0~500		350~700	
(the max. number of conducts: 2)		mm^2	95~240		95~240		185~370	
Conductor type			75℃ Cu stranded wire					



2pole for DC contact



3pole for DC contact



Coil voltage, AC/DC common

Nominal(ordering) voltage	AC 50/60Hz	DC
100/200V	100 - 240V	100 - 220V
300V	265 - 347V	-
400V	380 - 450V	-
500V	440 - 575V	-

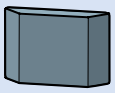
Certification

- •CE(IEC)
- •UL508
- •CCC

Accessories



AD-300
Delayed opening device



Safety cover, A7





AU-100, 100E
Auxiliary contact unit
side mount, 1NO+1NC



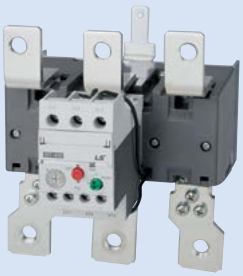
AP-400
Terminal cover



AR-180
Interlock unit
side mount



AI-180
Insulation barrier



MT-400
Overload relay
directly mountable to the contactor
Current range 85~400A

Contactors (800AF)

Description

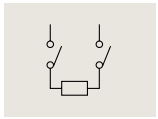
- 3-pole main contact
- AC/DC common use coil built
- Wide coil operation voltage
- Screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- Top/side mountable accessories available
- Overload relays available
- Degree of protection: IP00

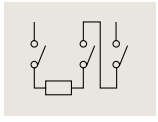


MC-800a

Rating

Contactor type			MC-500a		MC-630a		MC-800a	
			kW	A	kW	A	kW	A
AC duty	AC3	200/240V	147	500	190	630	220	800
		380/440V	265	500	330	630	440	800
		500/550V	265	400	330	500	500	720
		690V	300	380	400	420	500	630
		1000V	280	220	280	220	280	220
	AC4	200/240V	90	350	110	400	160	630
		380/440V	176	350	200	400	300	630
	AC1		-	700	-	900	-	1050
DC1 duty (L/R=1ms)	2-pole in series	24V	-	400	-	630	-	800
		48V	-	240	-	630	-	800
		110V	-	200	-	630	-	630
	3-pole in series	24V	-	400	-	630	-	800
		48V	-	400	-	630	-	800
		110V	-	400	-	630	-	800
DC3, 4 duty (L/R=15ms)	2-pole in series	24V	-	400	-	630	-	800
		48V	-	200	-	630	-	630
		110V	-	150	-	630	-	630
	3-pole in series	24V	-	400	-	630	-	800
		48V	-	280	-	630	-	630
		110V	-	200	-	630	-	630
Directly mountable Overload relay			MT-800					
Conductor size (solid, stranded)		AWG	350~800		600~2000		1700~Busbar	
(the max. number of conducts: 2)		mm^2	185~480		-		-	
Conductor type			75℃ Cu stranded wire					


2pole for DC contact


3pole for DC contact



Coil voltage, AC/DC common

Nominal(ordering) voltage	AC 50/60Hz	DC
100V	100 - 127V	100 - 110V
200V	200 - 240V	200 - 220V
300V	265 - 347V	-
400V	380 - 450V	-
500V	440 - 575V	-

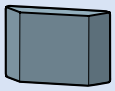
Certification

- CE(IEC)
- UL508
- CCC

Accessories



AD-600
Delayed opening device



Safety cover, A7





AU-100, 100E
Auxiliary contact unit
side mount, 1NO+1NC



AP-800
Terminal cover



AR-600
Interlock unit
side mount



AI-600
Insulation barrier



MT-800
Overload relay
directly mountable to the contactor
Current range 200~800A

Contactors (1260AF)

Description

- 3-pole main contact
- AC/DC common use coil built
- Wide coil operation voltage
- Screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- Side mountable accessories available
- Degree of protection: IP00



MC-1260a

Rating

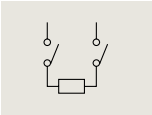
Contactor type			MC-1260a	
			kW	A
AC duty	AC3	200/240V	-	-
		380/440V	-	-
		500/550V	-	-
		690V	-	-
		1000V	-	-
	AC1		-	1260
Conductor size (solid, stranded)		Bubar	50mm x 10mm x 2ea	
Conductor type			Busbar	



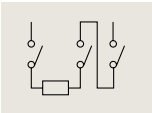
Coil voltage, AC/DC common

Nominal(ordering) voltage	AC 50/60Hz	DC
100V / 200V	100 - 240V	100 - 220V

Certification
•CE(IEC)
•UL, UL/cUL



2pole for DC contact



3pole for DC contact

Accessories





AU-100, 100E
Auxiliary contact unit
side mount, 1NO+1NC



AI-800
Insulation barrier

Contactors (2650AF)

Description

- 3-pole main contact
- AC/DC common use coil built
- Wide coil operation voltage
- Screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- Side mountable accessories available
- Degree of protection: IP00



MC-2650a

Rating

Contactor type			MC-1400a		MC-1700a		MC-2100a		MC-2650a	
			kW	A	kW	A	kW	A	kW	A
AC duty	AC3	200/240V	290	860	310	1050	-	-	-	-
		380/440V	550	860	700	1050	900	1450	-	-
		500/550V	-	-	-	-	-	-	-	-
		690V	800	800	1000	950	-	-	-	-
		1000V	-	-	-	-	-	-	-	-
	AC1		-	1400	-	1700	-	2100	-	2650
Conductor size (solid, stranded)(mm)		Busbar	100 x 5 x 2ea		100 x 5 x 3ea		100 x 5 x 4ea		100 x 10 x 3ea	
Conductor type			Busbar							



Coil voltage, AC/DC common

Nominal(ordering) voltage	AC 50/60Hz	DC
100V / 200V	100 - 240V	100 - 220V

Certification

- CE(IEC)
- UL60947-4-1
- CCC

Accessories





AU-100, 100E
Auxiliary contact unit
side mount, 1NO+1NC



Insulation barrier
AI-2100(MC-1400a~2100a)
AI-2650(MC-2650a)

Renewal Magnetic Contactor

1260AF Accessories





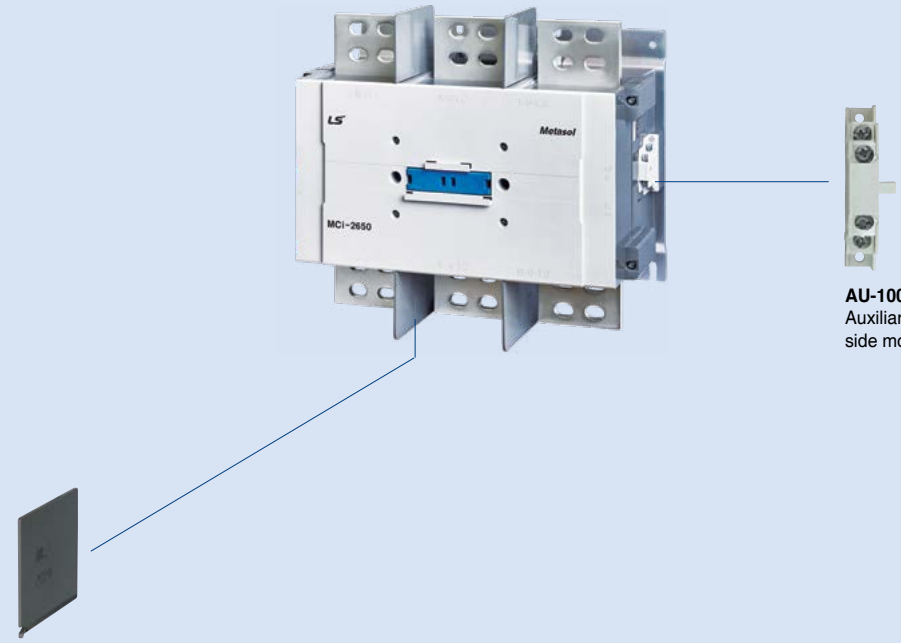
AU-100, 100E
Auxiliary contact unit
side mount, 1NO+1NC



AI-1260
Insulation barrier

Renewal Magnetic Contactor

2650AF Accessories



AU-100, 100E
Auxiliary contact unit
side mount, 1NO+1NC

Insulation barrier
AI-2650

Motor starters

Description

- Opened direct motor starter
- 3-pole(NO) main contact
- Finger proof design
- DIN rail or screw mountable
- AC or DC control contactor selectable
- Front/side mountable accessories available
- Overload relay is directly mounted to the contactor
- Degree of protection: IP20



Rating

Starter type			18AF				22AF			
			MS-6a	MS-9a	MS-12a	MS-18a	MS-9b	MS-12b	MS-18b	MS-22b
Number of poles			3				3			
Rated operational voltage (Ue)			690V				690V			
Degree of pollution (IEC60529)			IP20				IP20			
Rated operational current Ie (θ≤40℃)										
AC-1	Ue max 690V	A	25	25	25	32	25	27	32	45
AC-3	200/240V	A	9	11	13	18	11	13	18	22
	380/400V	A	7	9	12	18	9	12	18	22
	415V	A	7	9	12	18	9	12	18	22
	440V	A	7	9	12	18	9	12	18	22
	500V	A	6	7	12	13	7	12	13	20
	690V	A	4	5	9	9	6	9	9	18
	1000V	A	-	-	-	-	-	-	-	-
Rated operational power (θ≤40℃)										
AC-3	200/240V	kW	2.2	2.5	3.5	4.5	2.5	3.5	4.5	5.5
	380/400V	kW	3	4	5.5	7.5	4	5.5	7.5	11
	415V	kW	3	4	5.5	7.5	4	5.5	7.5	11
	440V	kW	3	4	5.5	7.5	4	5.5	7.5	11
	500V	kW	3	4	7.5	7.5	4	7.5	7.5	15
	690V	kW	3	4	7.5	7.5	4	7.5	7.5	15
	1000V	kW	-	-	-	-	-	-	-	-
According to IEC60947-4-1										
Rated making capacity AC-3			70	90	120	180	90	120	180	220
Rated breaking capacity AC-3			56	72	96	144	72	96	144	176
Electrical life for Ie/AC-3 Max										
in millions of operating cycles			2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Maximum operating rate										
in operating cycles per hour			1800	1800	1800	1800	1800	1800	1800	1800

Devices usable in the starter combination

Contactors										
with AC or DC control coil			MC-6a	MC-9a	MC-12a	MC-18a	MC-9b	MC-12b	MC-18b	MC-22b
with coil in common use for AC and DC			-	-	-	-	-	-	-	-
Thermal Overload Relays										
Class 10	Differential type		MT-12/3K				MT-32/3K			
	Non-differential type		MT-12/3H				MT-32/3H			
	Non-differential type(2-heater)		MT-12/2H				MT-32/2H			
Class 20	Differential type		MT-12/3D				MT-32/3D			
Setting range	A		0.1~18A				0.1~40A			



40AF		65AF		100AF		
MS-32a	MS-40a	MS-50a	MS-65a	MS-75a	MS-85a	MS-100a
3		3		3		
690V		690V		690V		
IP20		IP20		IP20		
55	60	100	115	125	135	160
32	40	55	65	75	85	105
32	40	50	65	75	85	105
32	40	50	65	75	85	105
32	40	50	65	75	85	105
28	32	43	60	64	75	85
20	23	28	35	42	45	65
17	17	23	23	28	28	28
7.5	11	15	18.5	22	25	30
15	18.5	22	30	37	45	55
15	18.5	22	30	37	45	55
15	18.5	22	30	37	45	55
18.5	22	30	33	37	45	55
18.5	22	30	33	37	45	55
22	22	30	30	37	37	37
320	400	500	650	750	850	1050
256	320	400	520	600	650	840
2	2	2	2	2	2	2
1800	1800	1800	1800	1800	1800	1800

MC-32a	MC-40a	MC-50a	MC-65a	MC-75a	MC-85a	MC-100a
-	-	-	-	-	-	-
MT-32/3K		MT-63/3K		MT-95/3K		
MT-32/3H		MT-63/3H		MT-95/3H		
MT-32/2H		MT-63/2H		MT-95/2H		
MT-32/3D		MT-63/3D		MT-95/3D		
0.1~40A		4~65A		7~100A		

Motor starters

Description

- Opened direct motor starter
- 3-pole(NO) main contacts
- Screw mountable
- AC/DC common use control contactor used (from 225AF)
- Additional accessories available
- Overload relay is directly mounted to the contactor
- Degree of protection: IP20



Rating

Starter type			150AF		225AF	
			MS-130a	MS-150a	MS-185a	MS-225a
Number of poles			3		3	
Rated operational voltage (Ue)			690V		690V	
Degree of pollution (IEC60529)			IP20		IP20	
Rated operational current Ie (θ≤40℃)						
AC-1	Ue max 690V	A	200	250	300	350
AC-3	200/240V	A	130	150	185	225
	380/400V	A	130	150	185	225
	415V	A	130	150	185	225
	440V	A	130	150	185	225
	500V	A	90	100	180	200
	690V	A	60	60	120	150
	1000V	A	50	50	90	90
Rated operational power (θ≤40℃)						
AC-3	200/240V	kW	37	45	55	75
	380/400V	kW	60	75	90	132
	415V	kW	60	75	90	132
	440V	kW	60	75	90	132
	500V	kW	60	70	110	132
	690V	kW	55	55	110	140
	1000V	kW	75	90	132	132
According to IEC60947-4-1						
Rated making capacity AC-3			1200	1500	1850	2250
Rated breaking capacity AC-3			960	1200	1480	1800
Electrical life for Ie/AC-3 Max in millions of operating cycles			1	1	1	1
Maximum operating rate in operating cycles per hour			1200	1200	1200	1200

Devices usable in the starter combination

Contactors						
with AC or DC control coil			MC-130a	MC-150a	-	-
with coil in common use for AC and DC			-	-	MC-185a	MC-225a
Thermal Overload Relays						
Class 10	Differential type		MT-150/3K		MT-225/3K	
	Non-differential type		MT-150/3H		MT-225/3H	
	Non-differential type(2-heater)		MT-150/2H		MT-225/2H	
Class 20	Differential type		MT-150/3D		MT-225/3D	
Setting range A			34~150A		65~240A	



400AF			800AF		
MS-265a	MS-330a	MS-400a	MS-500a	MS-630a	MS-800a
	3			3	
	690V			690V	
	IP20			IP20	
400	500	520	700	900	1050
265	330	400	500	630	800
265	330	400	500	630	800
265	330	400	500	630	800
265	330	400	500	630	800
225	280	350	400	500	720
185	220	300	380	420	630
105	105	105	220	220	220
80	90	125	147	190	220
147	160	200	265	330	440
147	160	200	265	330	440
147	160	200	265	330	440
147	160	225	265	330	500
160	200	250	300	400	500
147	147	147	280	280	280
2650	3300	4000	5000	6300	8000
2120	2640	3200	4000	5040	6400
1	1	0.5	0.5	0.5	0.5
1200	1200	1200	1200	1200	1200

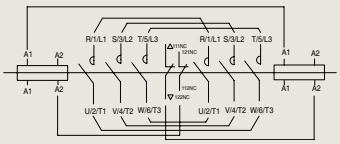
-	-	-	-	-	-
MC-265a	MC-330a	MC-400a	MC-500a	MC-630a	MC-800a
	MT-400/3K			MT-800/3K	
	MT-400/3H			MT-800/3H	
	MT-400/2H			MT-800/2H	
	MT-400/3D			MT-800/3D	
	85~400A			200~800A	

Reversing contactors

Description

- Two AC or DC control contactors are interlocked mechanically and electrically
- 3-pole(NO) main contact in each contactor
- Finger proof design
- DIN rail or screw mountable
- Front/side mountable accessories available
- Overload relay can be directly mounted to the contactor if necessary
- Please use interval time of over 25ms
- Degree of protection: IP20

Circuit diagram





MC-40a/R



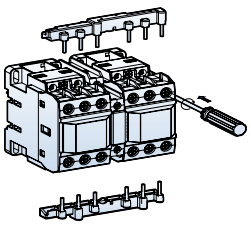
MC-65a/R



MC-100a/R

Rating

Type	AC-3 duty							Current (AC3)	Weight (AC control)
	200 ~ 240V	380 ~ 400V	415V	440V	500V	690V	1000V	440V	
	kW	kW	kW	kW	kW	kW	kW	A	
MC-6a/R	2.2	3	3	3	3	3	-	7	0.63kg
MC-9a/R	2.5	4	4	4	4	4	-	9	0.63kg
MC-12a/R	3.5	5.5	5.5	5.5	7.5	7.5	-	12	0.63kg
MC-18a/R	4.5	7.5	7.5	7.5	7.5	7.5	-	18	0.63kg
MC-9b/R	2.5	4	4	4	4	4	-	9	0.75kg
MC-12b/R	3.5	5.5	5.5	5.5	7.5	7.5	-	12	0.75kg
MC-18b/R	4.5	7.5	7.5	7.5	7.5	7.5	-	18	0.75kg
MC-22b/R	5.5	11	11	11	15	15	-	22	0.75kg
MC-32a/R	7.5	15	15	15	18.5	18.5	22	32	0.95kg
MC-40a/R	11	18.5	18.5	18.5	22	22	22	40	0.95kg
MC-50a/R	15	22	22	22	30	30	30	50	1.7kg
MC-65a/R	18.5	30	30	30	33	33	30	65	1.7kg
MC-75a/R	22	37	37	37	37	37	37	75	3.3kg
MC-85a/R	25	45	45	45	45	45	37	85	3.3kg
MC-100a/R	30	55	55	55	55	55	37	105	3.3kg





Coil voltage

AC	50Hz	24, 32, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 500, 550V
	60Hz	24, 48, 100, 110, 120, 200, 208, 220, 230, 240, 277, 380, 480, 600V
DC	DC	12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

Certification

- •CE(IEC)
- •UL508
- •CCC

Description

- 3-pole main contact
- Mechanically interlocked
- AC/DC common use coil built (from MC-185a/R)
- Wide coil operation voltage
- Screw mountable
- 4NO4NC Auxiliary contacts built-in
- Top/side mountable accessories available
- Please use interval time of over 50ms
- Degree of protection: IP20



Rating

Type	AC-3 duty							Current (AC3)	Weight (AC control)
	200 ~ 240V	380 ~ 400V	415V	440V	500V	690V	1000V	440V	
	kW	kW	kW	kW	kW	kW	kW	A	
MC-130a/R	37	60	60	60	60	55	75	130	4.3kg
MC-150a/R	45	75	75	75	70	55	75	150	4.3kg
MC-185a/R	55	90	90	90	110	110	132	185	13kg
MC-225a/R	75	132	132	132	132	140	132	225	13kg
MC-265a/R	80	147	147	147	147	160	147	265	21.4kg
MC-330a/R	90	160	160	160	160	200	147	330	21.4kg
MC-400a/R	125	200	200	200	225	250	147	400	21.4kg
MC-500a/R	147	265	265	265	265	300	280	500	60kg
MC-630a/R	190	330	330	330	330	400	280	630	60kg
MC-800a/R	220	440	440	440	440	500	280	800	60kg



Coil voltage

For MC130a/R and MC-150a/R

AC	50/60Hz	24, 48, 100~240, 110~120, 220~240, 300, 380~440, 500V
DC	DC	24, 48, 70~110, 100~220, 110, 220V

For MC-185a/R ~ MC-800a/R

- 24, 48, 100/200, 300, 400, 500V for types MC-185a/R, 225a/R
- 100/200, 300, 400, 500V for types MC-265a/R, 330a/R, 400a/R
- 100, 200, 300, 400, 500V for types MC-500a/R, 600a/R, 800a/R

Nominal(ordering) voltage	AC 50/60Hz	DC
24V	24 - 25V	24V
48V	48 - 50V	48V
100V	100 - 127V	100 - 110V
200V	200 - 240V	200 - 220V
100/200V	100 - 240V	100 - 220V
300V	265 - 347V	-
400V	380 - 450V	-
500V	440 - 575V	-

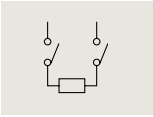
4-pole Contactors (18AF)

Description

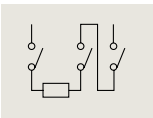
- 4-pole main contact
- Finger proof design
- DIN rail or screw mountable
- Small physical size: 44 mm wide
- Auxiliary contacts are optional
- Front/side mountable accessories
- Direct mountable overload relays available
- Degree of protection: IP20



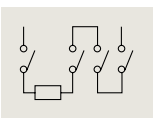
MC-18a/4



2pole for DC contact



3pole for DC contact



4pole for DC contact

Rating

Contactor type			MC-6a/4		MC-9a/4		MC-12a/4		MC-18a/4	
			kW	A	kW	A	kW	A	kW	A
AC duty	AC1	200/240V	9	25	9	25	9	25	15	40
		380/440V	17	25	17	25	17	25	27	40
		500/550V	21	25	21	25	21	25	35	40
		690V	27	25	27	25	27	25	44	40
	AC3	200/240V	2.2	9	2.5	11	3.5	13	4.5	18
		380/440V	3	7	4	9	5.5	12	7.5	18
		Ith	-	25	-	25	-	25	-	40
DC1 duty	2-pole	110V	-	6	-	6	-	10	-	13
(L/R=1ms)	in series	220V	-	3	-	3	-	7	-	8
	3-pole	110V	-	8	-	8	-	12	-	18
	in series	220V	-	8	-	8	-	12	-	18
	4-pole	110V	-	10	-	10	-	15	-	20
	in series	220V	-	10	-	10	-	12	-	20
UL rating			**hp**	**A**	**hp**	**A**	**hp**	**A**	**hp**	**A**
		220/240V	3	-	3	-	5	-	7.5	-
		440/480V	5	-	5	-	7.5	-	10	-
		550/600V	7.5	-	7.5	-	10	-	15	-
		Ith	-	25	-	25	-	25	-	32
Conductor size (solid, stranded)		AWG	18~10		18~10		16~10		16~8	
(the max. number of conducts: 2)		mm^2	1.5~4		1.5~10		1.5~10		1~4	
Conductor type			65/75℃ Cu-wire only							



Coil voltage

AC	50Hz	24, 32, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 500, 550V
	60Hz	24, 48, 100, 110, 120, 200, 208, 220, 230, 240, 277, 380, 480, 600V
	50/60Hz	24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V
DC	DC	12, 20, 24, 30, 48, 60, 80, 100, 110, 125, 200, 220, 250V

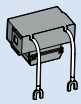
Certification

- •CE(IEC)
- •UL508
- •CCC

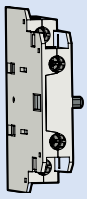
Accessories



Delayed opening device, AD-9

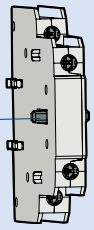


Surge unit, US
connecting to coil terminals

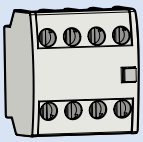


Auxiliary contact unit, UA-1
side mount, 1NO+1NC

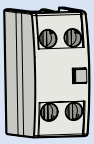




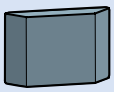
Interlock unit, UR
side mount



Auxiliary contact unit, UA-4
front mount, 4P



Auxiliary contact unit, UA-2
front mount, 2P



Safety cover, A7

4-pole Contactors (22, 40AF)

Description

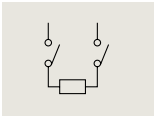
- 4-pole main contact
- Finger proof design
- DIN rail or screw mountable
- Auxiliary contacts are optional
- Front/side mountable accessories
- Direct mountable overload relays available
- Degree of protection: IP20



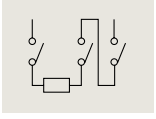
MC-22a/4



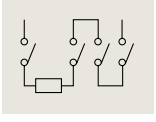
MC-40a/4



2pole for DC contact



3pole for DC contact



4pole for DC contact

Rating

Contactor type			MC-22a/4		MC-32a/4		MC-40a/4	
			kW	A	kW	A	kW	A
AC duty	AC1	200/240V	15	40	18	50	22	60
		380/440V	27	40	35	50	42	60
		500/550V	35	40	43	50	52	60
		690V	44	40	55	50	66	60
	AC3	200/240V	5.5	22	7.5	32	11	40
		380/440V	11	22	15	32	18.5	40
		Ith	-	40	-	50	-	60
DC1 duty	2-pole	110V	-	15	-	25	-	25
(L/R=1ms)	in series	220V	-	10	-	12	-	12
	3-pole	110V	-	20	-	25	-	35
	in series	220V	-	20	-	22	-	30
	4-pole	110V	-	30	-	32	-	40
	in series	220V	-	25	-	30	-	35
UL rating			**hp**	**A**	**hp**	**A**	**hp**	**A**
		220/240V	7.5	-	10	-	10	-
		440/480V	10	-	20	-	25	-
		550/600V	15	-	20	-	25	-
		Ith	-	32	-	45	-	50
Conductor size (solid, stranded)		AWG	12~8		10~6		8~6	
(the max. number of conducts: 2)		mm^2	2.5~10		4~16		10~16	
Conductor type			65/75℃ Cu-wire only					

Coil voltage

AC	50Hz	24, 36, 42, 48, 65, 80, 100, 110, 220, 230, 240, 380, 400, 415, 440, 500, 550, 240(wide)V
	60Hz	24, 48, 110, 208, 220, 240, 277, 380, 440, 480, 600V
	50/60Hz	24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 400, 415, 440, 500, 550V
DC	DC	12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

Certification

- CE(IEC)
- UL508
- CCC

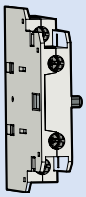
Accessories



Delayed opening device, AD-9

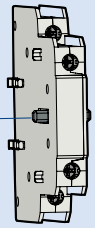


Surge unit, AS
connecting to coil terminals

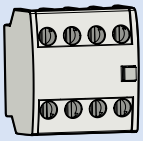


Auxiliary contact unit, AU-1
side mount, 1NO+1NC

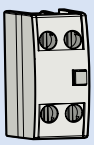




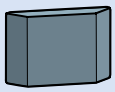
Interlock unit, AR-9
side mount



Auxiliary contact unit, UA-4
front mount, 4P



Auxiliary contact unit, UA-2
front mount, 2P



Safety cover, A7

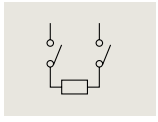
4-pole Contactors (85AF)

Description

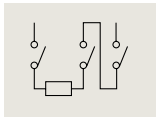
- 4-pole main contact
- Finger proof design
- DIN rail or screw mountable
- Auxiliary contacts are optional
- Front/side mountable accessories
- Direct mountable overload relays available
- Degree of protection: IP20



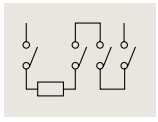
MC-85a/4



2pole for DC contact



3pole for DC contact



4pole for DC contact

Rating

Contactor type			MC-50a/4		MC-65a/4		MC-75a/4		MC-85a/4	
			kW	A	kW	A	kW	A	kW	A
AC duty	AC1	200/240V	30	80	37	100	41	110	51	135
		380/440V	56	80	70	100	76	110	95	135
		500/550V	70	80	88	100	97	110	120	135
		690V	88	80	110	100	120	110	150	135
	AC3	200/240V	15	55	18.5	65	22	75	25	85
		380/440V	22	50	30	65	37	75	45	85
		Ith	-	80	-	100	-	110	-	135
DC1 duty	2-pole	110V	-	35	-	35	-	50	-	50
(L/R=1ms)	in series	220V	-	15	-	15	-	20	-	20
	3-pole	110V	-	50	-	65	-	75	-	80
	in series	220V	-	40	-	50	-	55	-	60
	4-pole	110V	-	60	-	70	-	80	-	100
	in series	220V	-	50	-	60	-	70	-	70
UL rating			**hp**	**A**	**hp**	**A**	**hp**	**A**	**hp**	**A**
		220/240V	15	-	20	-	25	-	30	-
		440/480V	30	-	40	-	50	-	50	-
		550/600V	30	-	40	-	50	-	50	-
		Ith	-	70	-	80	-	90	-	100
Conductor size (solid, stranded)		AWG	8~4		6~3		4~2		4~1	
(the max. number of conducts: 2)		mm^2	10~25		16~35		25~35		25~50	
Conductor type			65/75℃ Cu-wire only							

Coil voltage

AC	50Hz	24, 48, 100, 110, 200, 220, 230, 240, 380, 400, 415, 440, 500, 550V, 240(wide)
	60Hz	24, 48, 110, 120, 208, 220, 240, 277, 380, 440, 480, 600V
	50/60Hz	24, 48, 110, 120, 220, 230, 240, 380, 400, 415, 440, 500, 550V
DC	DC	12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

Certification

- CE(IEC)
- UL508
- CCC

Accessories

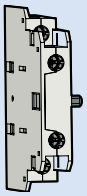


Delayed opening device, AD-50

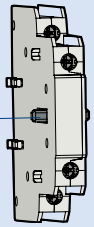


Surge unit, AS
connecting to coil terminals

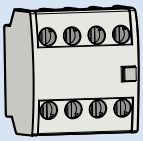




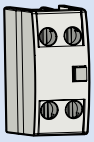
Auxiliary contact unit, AU-1
side mount, 1NO+1NC



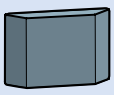
Interlock unit, AR-9
side mount



Auxiliary contact unit, UA-4
front mount, 4P



Auxiliary contact unit, UA-2
front mount, 2P



Safety cover, A7

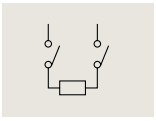
4-pole Contactors (225AF)

Description

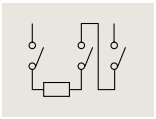
- 4-pole main contact
- AC/DC common use coil built
- Wide coil operation voltage
- Screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- Side mountable accessories
- Direct mountable overload relays available
- Degree of protection: IP20



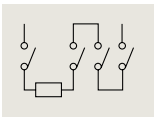
MC-225a/4



2pole for DC contact



3pole for DC contact



4-pole in series

Rating

Contactor type			MC-100a/4		MC-130a/4		MC-150a/4		MC-185a/4		MC-225a/4	
			kW	A	kW	A	kW	A	kW	A	kW	A
AC duty	AC1	200/240V	57	200	60	250	76	275	87	300	100	350
		380/440V	106	200	110	250	142	275	165	300	185	350
		500/550V	132	200	137	250	180	275	205	300	230	350
		690V	165	200	170	250	225	275	255	300	290	350
	AC3	200/240V	30	105	37	125	45	150	55	185	75	225
		380/440V	55	105	60	120	75	150	90	185	132	225
		Ith	-	200	-	250	-	275	-	300	-	350
DC1 duty	2-pole	110V	-	80	-	80	-	100	-	150	-	150
(L/R=1ms)	in series	220V	-	50	-	50	-	100	-	150	-	150
	3-pole	110V	-	100	-	100	-	150	-	180	-	220
	in series	220V	-	80	-	80	-	150	-	180	-	220
	4-pole	110V	-	100	-	100	-	150	-	180	-	220
	in series	220V	-	90	-	100	-	150	-	180	-	220
UL rating			**hp**	**A**	**hp**	**A**	**hp**	**A**	**hp**	**A**	**hp**	**A**
		220/240V	30	-	40	-	50	-	60	-	75	-
		440/480V	60	-	75	-	100	-	125	-	150	-
		550/600V	60	-	75	-	100	-	125	-	150	-
		Ith	-	200	-	250	-	275	-	300	-	350
Conductor size (solid, stranded)		AWG	6~00		3~00		3~4/0		1~4/0		0~300	
(the max. number of conducts: 2)		mm^2	16~70		35~70		35~95		50~95		50~150	
Conductor type			75°C Cu stranded wire									

Coil voltage, AC/DC common

Nominal(ordering) voltage	AC 50/60Hz	DC
24V	24 - 25V	24V
48V	48 - 50V	48V
100/200V	100 - 240V	100 - 220V
300V	265 - 347V	-
400V	380 - 450V	-
500V	440 - 575V	-

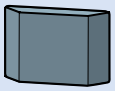
Certification

- •CE(IEC)
- •UL508
- •CCC

Accessories



AD-100
Delayed opening device



Safety cover, A7





AU-100, 100E
Auxiliary contact unit
side mount, 1NO+1NC



AP220/4
Terminal cover



AR-180
Interlock unit
side mount



AI-180
Insulation barrier

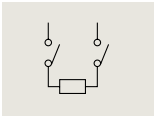
4-pole Contactors (400AF)

Description

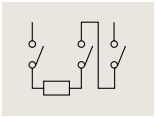
- 4-pole main contact
- AC/DC common use coil built
- Wide coil operation voltage
- Screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- Side mountable accessories
- Degree of protection: IP20



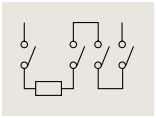
MC-400a/4



2pole for DC contact



3pole for DC contact



4pole for DC contact

Rating

Contactor type			MC-265a/4		MC-330a/4		MC-400a/4	
			kW	A	kW	A	kW	A
AC duty	AC1	200/240V	115	400	135	500	160	520
		380/440V	215	400	250	500	300	520
		500/550V	265	400	315	500	375	520
		690V	335	400	390	500	470	520
	AC3	200/240V	80	265	90	330	125	400
		380/440V	147	265	160	330	200	400
		Ith	-	400	-	500	-	520
DC1 duty	2-pole	110V	-	150	-	200	-	200
(L/R=1ms)	in series	220V	-	150	-	200	-	200
	3-pole	110V	-	220	-	300	-	400
	in series	220V	-	220	-	300	-	300
	4-pole	110V	-	220	-	300	-	400
	in series	220V	-	220	-	300	-	300
UL rating			**hp**	**A**	**hp**	**A**	**hp**	**A**
		220/240V	100	-	100	-	150	-
		440/480V	200	-	200	-	300	-
		550/600V	200	-	200	-	300	-
		Ith	-	400	-	500	-	520
Conductor size (solid, stranded)		AWG	3/0~500		4/0~500		350~700	
(the max. number of conducts: 2)		mm^2	95~240		95~240		185~370	
Conductor type			75°C Cu stranded wire					

Coil voltage, AC/DC common

Nominal(ordering) voltage	AC 50/60Hz	DC
100/200V	100 - 240V	100 - 220V
300V	265 - 347V	-
400V	380 - 450V	-
500V	440 - 575V	-

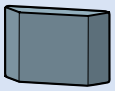
Certification

- •CE(IEC)
- •UL508
- •CCC

Accessories



AD-300
Delayed opening device



Safety cover, A7





AU-100, 100E
Auxiliary contact unit
side mount, 1NO+1NC



AP-400/4
Terminal cover



AR-180
Interlock unit
side mount



AI-180
Insulation barrier

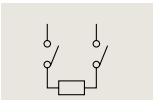
4-pole Contactors (800AF)

Description

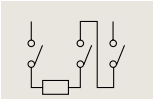
- 4-pole main contact
- AC/DC common use coil built
- Wide coil operation voltage
- Screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- Side mountable accessories
- Degree of protection: IP20



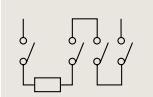
MC-800a/4



2pole for DC contact



3pole for DC contact



4pole for DC contact

Rating

Contactor type			MC-500a/4		MC-630a/4		MC-800a/4	
			kW	A	kW	A	kW	A
AC duty	AC1	200/240V	245	700	255	900	310	1050
		380/440V	450	700	470	900	570	1050
		500/550V	560	700	590	900	710	1050
		690V	710	700	740	900	900	1050
	AC3	200/240V	147	500	190	630	220	800
		380/440V	265	500	330	630	440	800
		Ith	-	700	-	900	-	1050
DC1 duty	2-pole	110V	-	200	-	630	-	630
(L/R=1ms)		220V	-	200	-	630	-	630
	3-pole	110V	-	400	-	630	-	800
		220V	-	300	-	630	-	800
	4-pole	110V	-	400	-	630	-	800
		220V	-	300	-	630	-	800
UL rating			**hp**	**A**	**hp**	**A**	**hp**	**A**
		220/240V	200	-	250	-	300	-
		440/480V	400	-	500	-	600	-
		550/600V	400	-	500	-	600	-
		Ith	-	700	-	900	-	1050
Conductor size (solid, stranded)		AWG	350~800		600~2000		1700~Busbar	
(the max. number of conducts: 2)		mm^2	185~480		-		-	
Conductor type			75°C Cu stranded wire					

Coil voltage, AC/DC common

Nominal(ordering) voltage	AC 50/60Hz	DC
100V	100 - 127V	100 - 110V
200V	200 - 240V	200 - 220V
300V	265 - 347V	-
400V	380 - 450V	-
500V	440 - 575V	-

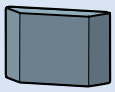
Certification

- •CE(IEC)
- •UL508
- •CCC

Accessories



AD-600
Delayed opening device



Safety cover, A7





AU-100, 100E
Auxiliary contact unit
side mount, 1NO+1NC



AP-800/4
Terminal cover



AR-600
Interlock unit



AI-600
Insulation barrier

2-pole AC Contactors, Definite purpose





Description

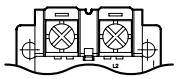
- Two normally open main contacts
- Screw clamp or fast-on connections
- Small and light design suitable for use in air conditioners, heaters, refrigerators, etc.
- Screw mountable
- No auxiliary contact
- AC control voltage

Ratings

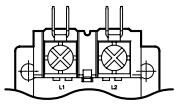
Type	AC3 ratings			Ith	Contact	
	220~240V	380~440V	500~550V		NO	NC
GMC-10P2	10A	8A	6A	20A	2	-
GMC-20P2	20A	17A	14A	30A	2	-
GMC-25P2	25A	21A	17A	35A	2	-
GMC-30P2	30A	23A	21A	40A	2	-
GMC-35P2	35A	26A	23A	45A	2	-
GMC-40P2	40A	32A	26A	50A	2	-

Insulation voltage: 690V at AC, 250V at DC

Main terminal



Screw clamp



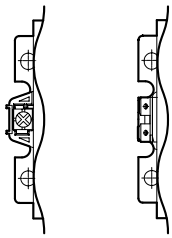
Fast-on (Quick connect)

Control coil characteristics

Coil voltage	Coil consumption (VA)		Thermal dissipation (W)	Operational voltage(V)		Coil current (mA)	Operational time (ms)	
	Inrush	Holding		Pick-up	Drop-out		Closing	Opening
24V 50/60Hz	35	6.0	2	18~20	10~15	263	40	30
48V 50/60Hz	35	6.0	2	36~40	19~27	131	40	30
100V 50/60Hz	35	6.0	2	74~81	39~57	63	40	30
110V 50/60Hz	35	6.0	2	78~90	50~64	57	40	30
120V 50/60Hz	35	6.0	2	90~100	52~66	53	40	30
200V 50/60Hz	35	6.0	2	155~165	80~115	32	40	30
220V 50/60Hz	35	6.0	2	160~175	90~120	29	40	30
230V 50/60Hz	35	6.0	2	165~180	110~130	27	40	30
240V 50/60Hz	35	6.0	2	168~185	110~135	26	40	30

Note) 1. The condition of the above data: 60Hz. 20℃ from cold state
2. Coil consumption (VA) is average value.

Coil terminal



Screw clamp　　Fast-on (Quick connect)

Type numbering system

GMC / 10P 2 / TS BQ 100V

Contactors

Capacity (A)

10P	10
20P	20
25P	25
30P	30
35P	35
40P	40

Pole

2	2pole

Main terminal connect

TS	Screw clamp
TQ	Quick connect

Power supply connect

BS	Screw clamp
BQ	Quick connect

Operation voltage (AC)

20V	24V
48V	24~240V
110V	100~120V
220V	208~240V

3-pole AC Contactors, Definite purpose



Description

- Three main contacts
- Screw clamp connections
- Small and light design suitable for use in air conditioners, heaters, refrigerators, etc.
- Screw mountable
- No auxiliary contact
- AC control voltage

Ratings

Type	AC3 ratings			AC4 ratings			Ith	Contact	
	220~240V	380~440V	500~550V	220~240V	380~440V	500~550V		NO	NC
GMC-20D2 GMC-20D3	20A	17A	14A	18A	13A	10A	30A	2	-
								3	-
								2	1
GMC-25D2 GMC-25D3	25A	21A	17A	20A	14A	12A	35A	2	-
								3	-
								2	1

Note) Above contact ratings are for NO contact.
Rating for NC contact: 6A@120V, 3A@240V, 1.5A@480V at AC15 duty
Rating above 24V 1A
Please use NC contact for Insulation voltage: 690V at AC, 250V at DC

Control coil characteristics

Coil voltage	Coil consumption (VA)		Thermal dissipation (W)	Operational voltage(V)		Coil current (mA)	Operational time (ms)	
	Inrush	Holding		Pick-up	Drop-out		Closing	Opening
24V 60Hz	72	9.0	3	17~19	12.5~15.5	215	30	20
48V 60Hz	72	9.0	3	32~36	26~30	125	30	20
110V 60Hz	72	9.0	3	75~85	65~75	60	30	20
220V 60Hz	72	9.0	3	150~170	120~145	41	30	20

Note) 1. The condition of the above data: 60Hz. 20 ℃ from cold state
2. Coil consumption (VA) is average value.

Type numbering system

GMC / 20 D2 2NO1NC AC 220V

GMC — Contactors

20 — Rated current

20	20
25	25

D2 — Pole

D2	2NO, 2NO1NC
D3	3NO

2NO1NC — Auxiliary contact

-	2pole: 2NO
	3pole: 3NO
2NO1NC	2NO1NC

AC 220V — Operation voltage (AC)

20V
48V
110V
220V

Single-pole AC Contactors, Definite purpose



Description

- Single-pole NO main contact
- Small and light design suitable for use in electric shock protector for AC arc welder
- DIN rail or screw mountable
- No auxiliary contact (Optional unit can be added up to 2NO2NC)
- AC control voltage

Ratings

Type	Rated current, In 110/220V	Ith	Performance	
			Making current	Breaking current
MC-65aSP	220A	500A	1.5×In	

Control coil characteristics

Coil consumption (VA)		Operational voltage		Operational time
Inrush	Holding	Pick-up	Drop-out	Closing
150VA	17VA	85% under	20% over	30ms under

Note) Coil voltage is available between AC24V and AC550V

2-pole DC Contactors

Description

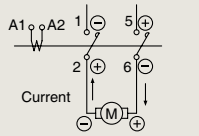


- Two normally open main contacts for DC circuit
- Positive and negative poles indicated on the front plate
- Eternal magnet installed for the effective arc extinguishing
- DIN rail or screw mountable
- 2NO+2NC Auxiliary contacts built-in as standard
- AC/DC control voltage



Selection

Contactor Type	DC-3, 5 ratings			DC-1 rating	Continuous current, Ith	Auxiliary contacts
	125V	250V	500V	1000V		
MD-30a	40A	30A	20A	10A	60A	2a(NO)+2b(NC)
MD-60a	80A	60A	40A	25A	100A	2a(NO)+2b(NC)
MD-100a	120A	100A	60A	35A	135A	2a(NO)+2b(NC)



Ratings of auxiliary contacts

UA-1	AC15 duty						DC13 duty				
	120V	240V	380V	480V	500V	600V	125V	250V	400V	500V	600V
Rated currents	6A	3A	1.9A	1.5A	1.4A	1.2A	1.1A	0.55A	0.31A	0.27A	0.2A
Continuous current, Ith	16A										



Coil voltage

AC	50/60Hz	24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 400, 415, 440, 500, 550V
DC	DC	12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V