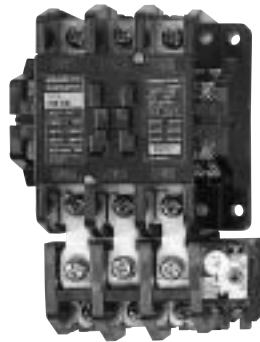
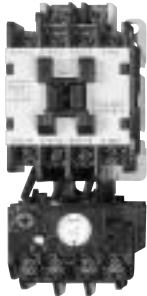


STANDARD MAGNETIC STARTERS AND CONTACTORS



Model identification

PAK — 20 JT 20 — A C

Type
PAK ...Standard model

Model		
J	H	
6	50	300
11	65	400
12	80	600
20	100	800
21	125	
26	150	
35	220	

J	H	Specifications
J	H	Magnetic contactor ① (without enclosure)
JT	HT	Magnetic starter (without enclosure)
JM	HM	Magnetic starter (with enclosure)
JB	HB	Magnetic contactor (with enclosure)

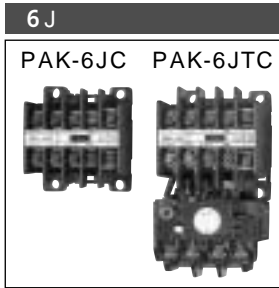
注 ① Only PAK-6J accompanies "c" at the end of model name.

Aux. contact configuration
PAK-6JC、11J
12J、20J
Blank.....1NO
31.....1NC
PAK-21J
Blank.....1NO1NC
20.....2NO
02.....2NC
PAK-26J ~ 200H
Blank.....2NO2NC
PAK-300、400H
Blank.....3NO3NC
PAK-600、800H
Blank.....4NO4NC

Options
A...Ammeter
D...Pushbutton

Career mark
Only magnetic starter However, except 300HT ~ 600HT

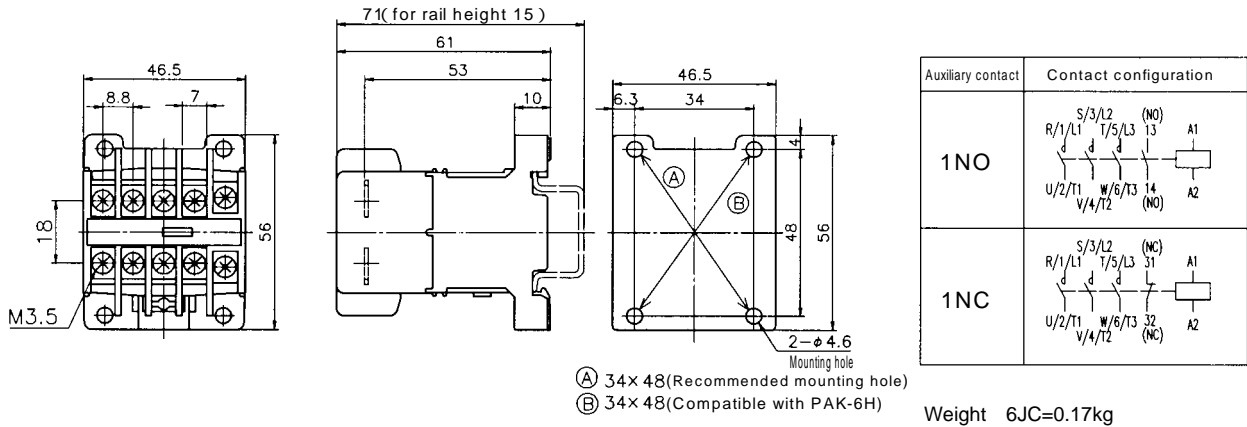
Ratings, performance and specifications



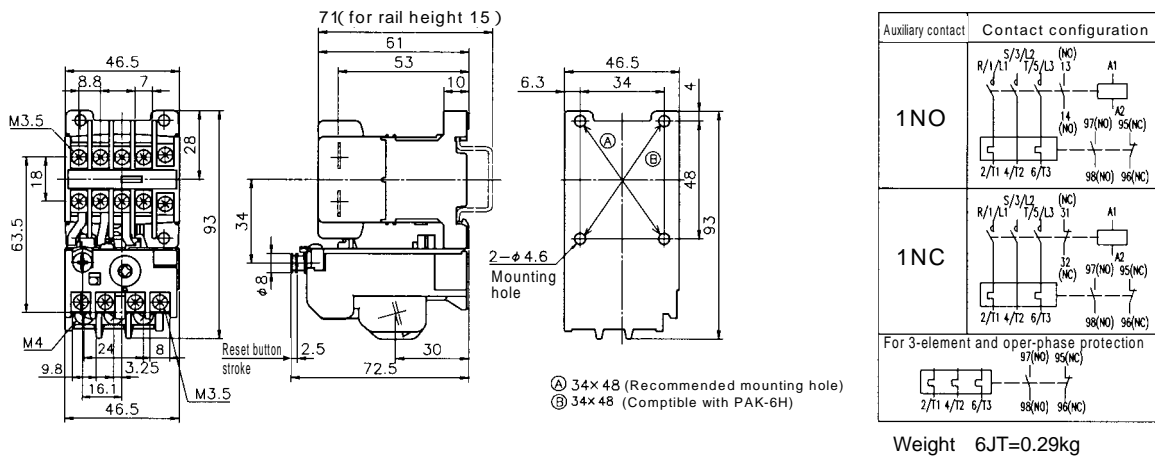
Ratings		Frame	6J
Rated capacity	AC-3 (kW)	240V	2.2
		440V	4
		550V	4
	AC-1 (A) (500,000 ops)	240V	15
		440V	15
		550V	15

Applicable wire size and tightening torque					
		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m(kgf·cm)
Contactor	Main circuit	M3.5	1 ~ 2	1.25 - 3.5	0.8 ~ 1.2 (8 ~ 12)
	Aux. circuit		0.5 ~ 2mm ^φ		
Thermal overload relay	Main circuit	M4	1 ~ 2	1.25 - 4	1.2 ~ 1.8 (12 ~ 18)
	Aux. circuit	M3.5	0.5 ~ 5.5mm ^φ	5.5 - 4	0.8 ~ 1.2 (8 ~ 12)

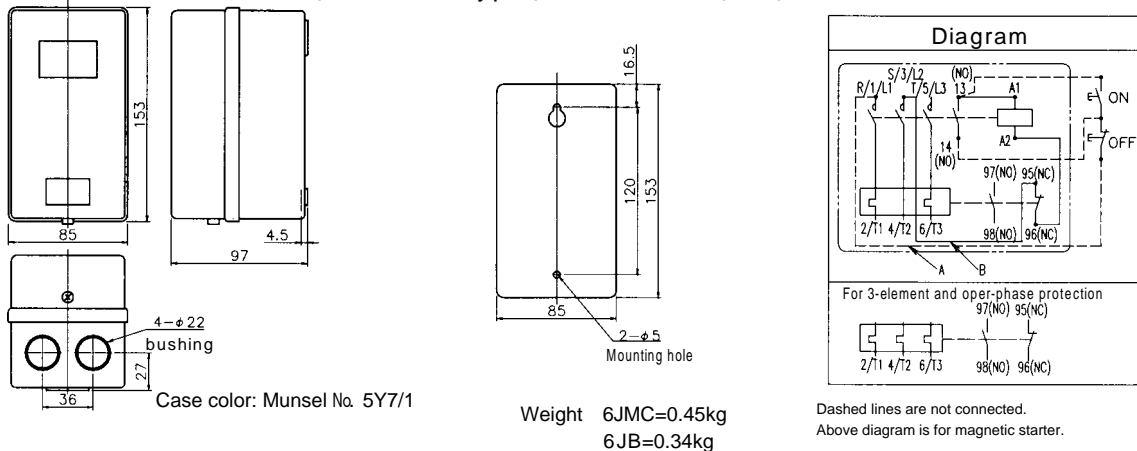
Magnetic contactor (open type) PAK-6JC



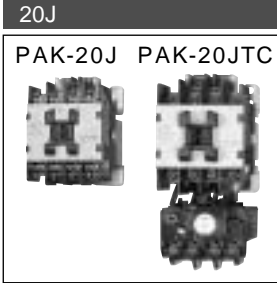
Magnetic starter (open type) PAK-6JTC



Magnetic starter · contactor (enclosed type) PAK-6JMC (JB)



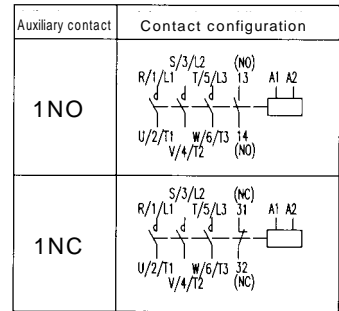
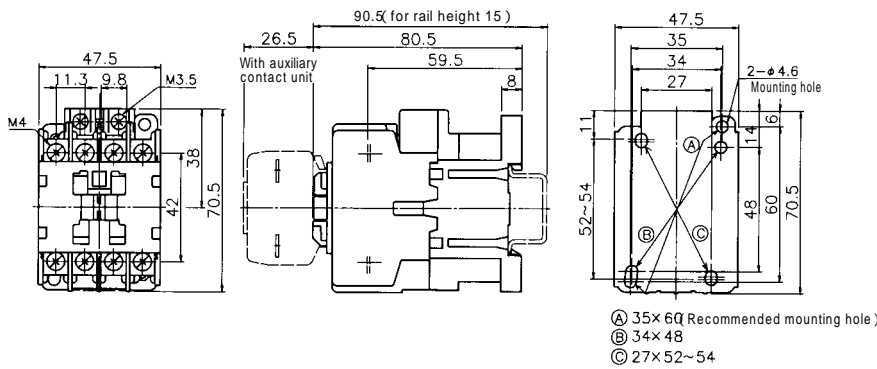
① If operating from other power source, remove " B ", and connect the supply to #95 and " A " on the pushbutton terminal.



Ratings		Frame	20J
Rated capacity	AC-3 (kW)	240V	7.5
		440V	11
		550V	11
	AC-1 (A) (500,000 ops)	240V	32
		440V	32
550V		32	

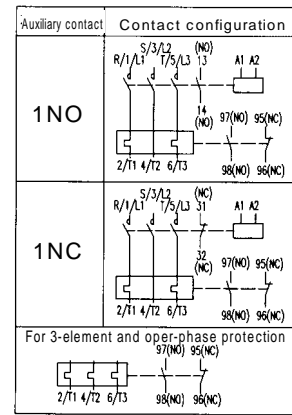
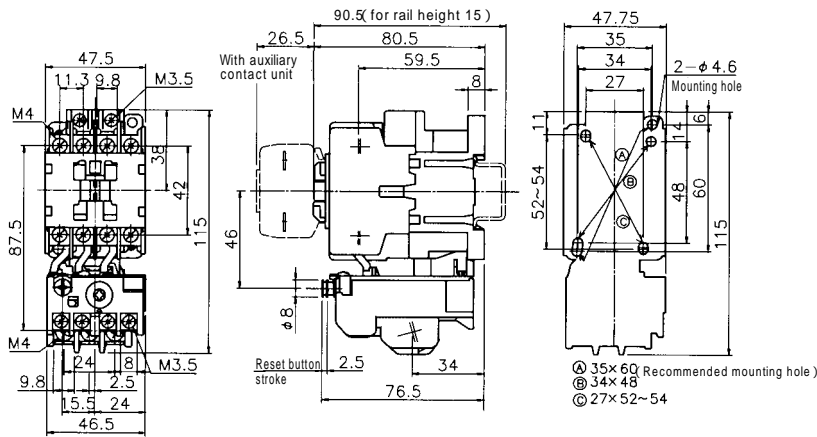
Applicable wire size and tightening torque					
		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m(kgf·cm)
Contactor	Main c.	M4	1 ~ 2	1.25-4	1.2 ~ 1.8
	Aux c.		0.5 ~ 3.5mm ²	5.5-4	(12 ~ 18)
Thermal overload relay	coil circuit	M3.5	1 ~ 1.6	1.25-3.5	0.8 ~ 1.2
			0.5 ~ 2mm ²	2-3.5	(8 ~ 12)
	Main circuit	M4	1 ~ 2	1.25-4	1.2 ~ 1.8
	Aux. circuit		0.5 ~ 3.5mm ²	5.5-4	(12 ~ 18)
		M3.5	1 ~ 1.6	1.25-3.5	0.8 ~ 1.2
			0.5 ~ 2mm ²	2-3.5	(8 ~ 12)

Magnetic contactor (open type) PAK-20J



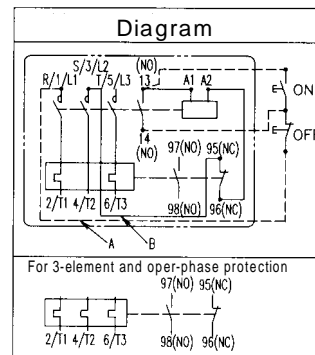
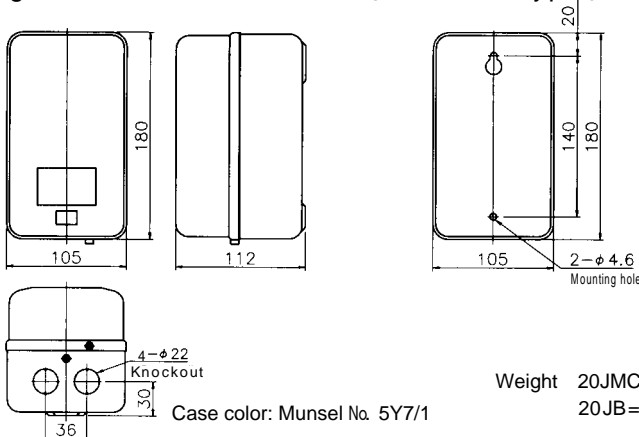
Weight 20J=0.32kg

Magnetic starter (open type) PAK-20JTC



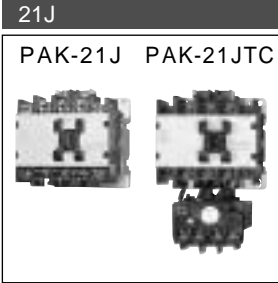
Weight 20JTC=0.42kg

Magnetic starter · contactor (enclosed type) PAK-20JMC (JB)



Dashed lines are not connected.
 Above diagram is for magnetic starter.

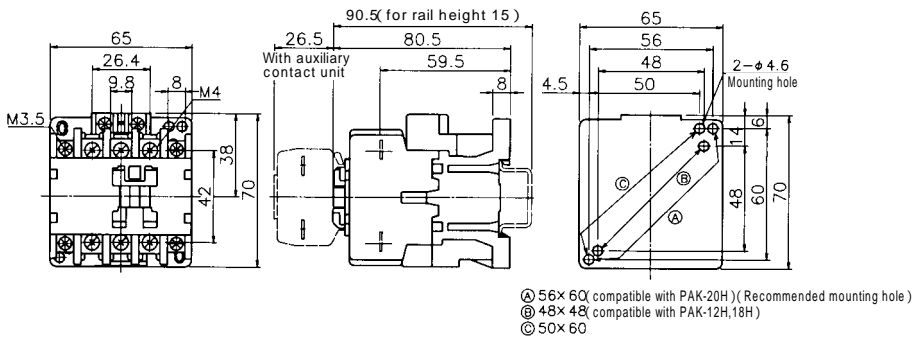
① If operating from other power source, remove " B ", and connect the supply to #95 and " A " on the pushbutton terminal.



Ratings		21J	
Rated capacity	Frame	21J	
		AC-3 (kW)	7.5
		AC-1 (A) (500,000 ops)	32
	AC-3 (kW)	240V	7.5
		440V	11
		550V	11
AC-1 (A) (500,000 ops)	240V	32	
	440V	32	
	550V	32	

Applicable wire size and tightening torque					
		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m(kgf·cm)
Contactor	Main circuit	M4	1 ~ 2 0.5 ~ 3.5mm ²	1.25-4 5.5-4	1.2 ~ 1.8 (12 ~ 18)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)
Thermal overload relay	Main circuit	M4	1 ~ 2 0.5 ~ 3.5mm ²	1.25-4 5.5-4	1.2 ~ 1.8 (12 ~ 18)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)

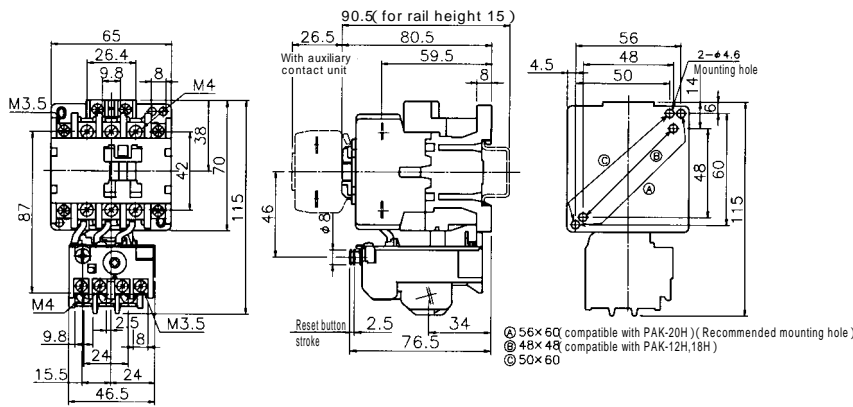
Magnetic contactor (open type) PAK-21J



Auxiliary contact	Contact configuration
1NO1NC	<p>(NO) 13 R/1/L1 S/3/L2 T/5/L3 31 (NC) A1A2 14 U/2/T1 W/6/T3 32 (NO) V/4/T2</p>
2NO	<p>(NO) 13 R/1/L1 S/3/L2 T/5/L3 23 (NO) A1A2 14 U/2/T1 W/6/T3 24 (NO) V/4/T2</p>
2NC	<p>(NC) 31 R/1/L1 S/3/L2 T/5/L3 41 (NC) A1A2 32 U/2/T1 W/6/T3 42 (NC) V/4/T2</p>

Weight 21J=0.36kg

Magnetic starter (open type) PAK-21JTC

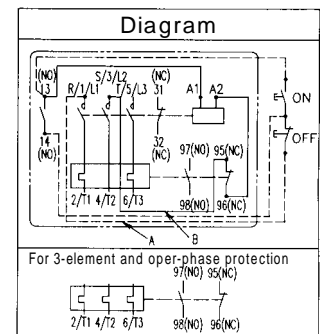
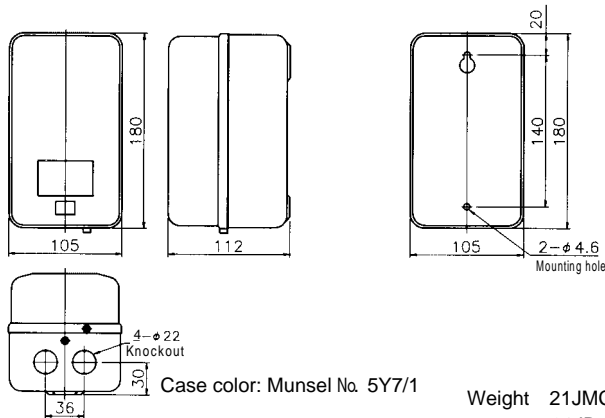


Auxiliary contact	Contact configuration
1NO1NC	<p>(NO) 13 R/1/L1 S/3/L2 T/5/L3 31 (NC) A1A2 14 U/2/T1 W/6/T3 32 (NO) V/4/T2 97(NO) 95(NC) 98(NO) 96(NC)</p>
2NO	<p>(NO) 13 R/1/L1 S/3/L2 T/5/L3 23 (NO) A1A2 14 U/2/T1 W/6/T3 24 (NO) V/4/T2 97(NO) 95(NC) 98(NO) 96(NC)</p>
2NC	<p>(NC) 31 R/1/L1 S/3/L2 T/5/L3 41 (NC) A1A2 32 U/2/T1 W/6/T3 42 (NC) V/4/T2 97(NO) 95(NC) 98(NO) 96(NC)</p>

For 3-element and oper-phase protection
 97(NO) 95(NC)
 2/71 4/72 6/73 98(NO) 96(NC)

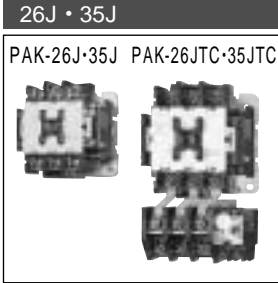
Weight 21JTC=0.47kg

Magnetic starter · contactor (enclosed type) PAK-21JMC (JB)



Dashed lines are not connected.
 Above diagram is for magnetic starter.

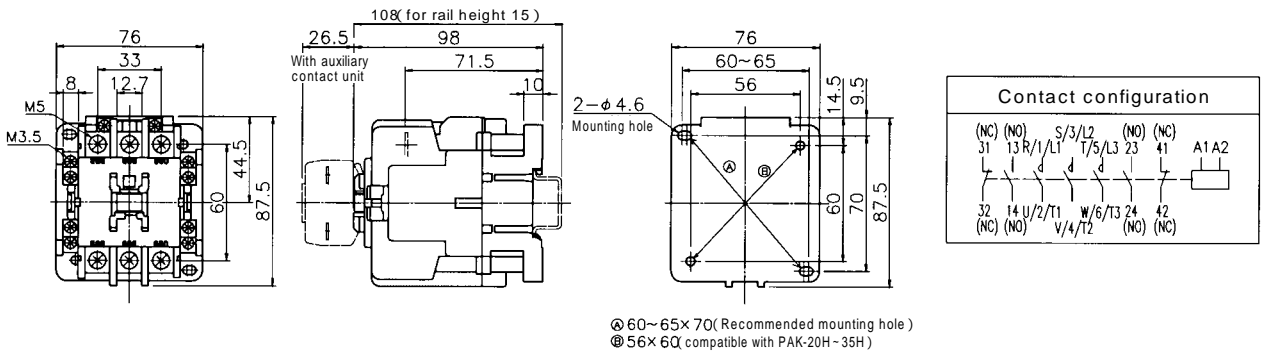
① If operating from other power source, remove " B ", and connect the supply to #95 and " A " on the pushbutton terminal.



Ratings		26J	35J
Rated capacity	AC-3 (kW)	240V	10
		440V	20
		550V	20
	AC-1 (A) (500,000 ops)	240V	50
		440V	50
		550V	50

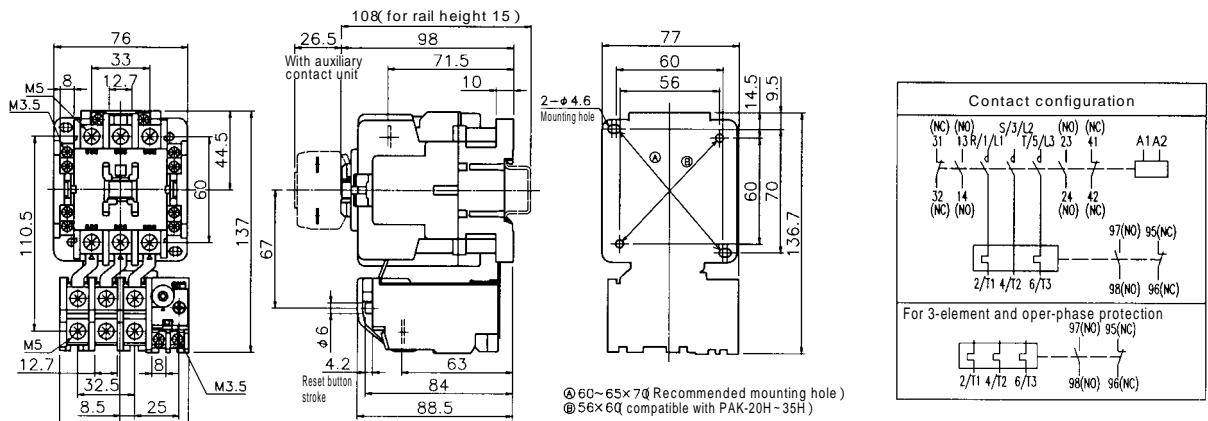
Applicable wire size and tightening torque					
		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m(kgf·cm)
Contactor	Main circuit	M5	1.6 ~ 3.2 1.25 ~ 14mm ²	1.25-5 14-5	2.4 ~ 3.5 (24 ~ 36)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)
Thermal overload relay	Main circuit	M5	1.6 ~ 3.2 1.25 ~ 14mm ²	1.25-5 14-5	2.4 ~ 3.5 (24 ~ 36)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)

Magnetic contactor (open type) PAK-26J · 35J



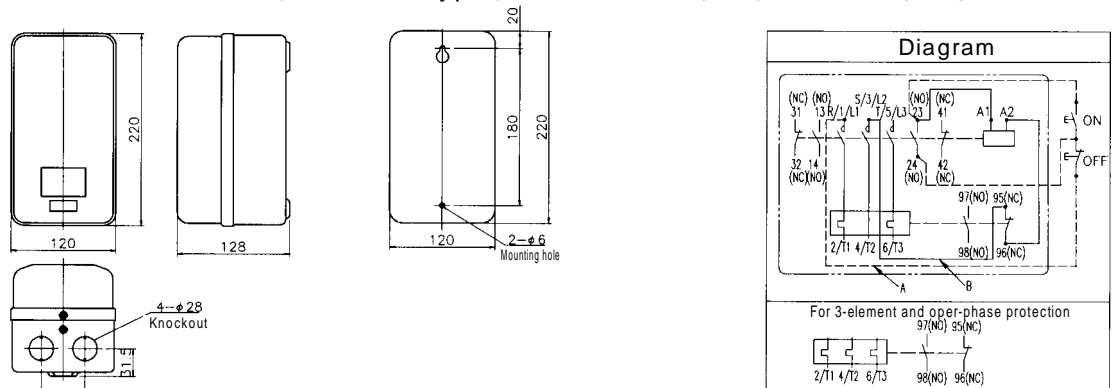
Weight 26J · 35J=0.68kg

Magnetic starter (open type) PAK-26JTC · 35JTC



Weight 26JTC · 35JTC=0.91kg

Magnetic starter · contactor (enclosed type) PAK-26JMC (JB) · 35JMC (JB)



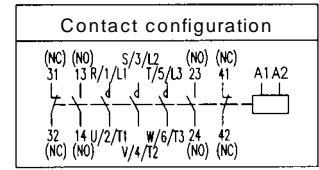
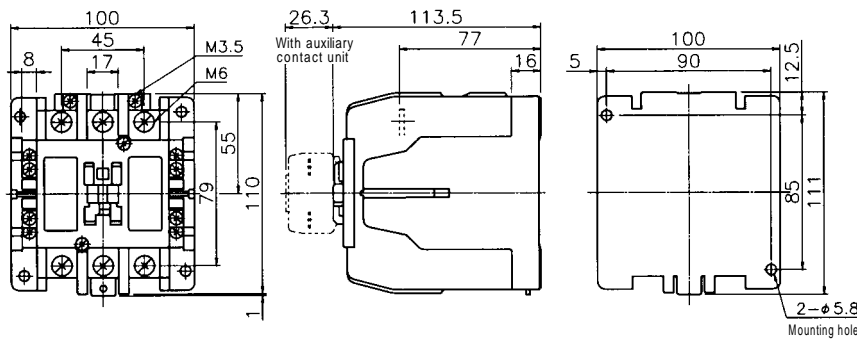
① If operating from other power source, remove " B ", and connect the supply to #95 and " A " on the pushbutton terminal.



Ratings		50H	65H	
Rated capacity	Frame	50H	65H	
		AC-3 (kW)	220V 15	19
		440V 30	37	
	550V 26	37		
	AC-1 (A) (500,000 ops)	220V	75	90
		440V	75	90
550V		75	90	

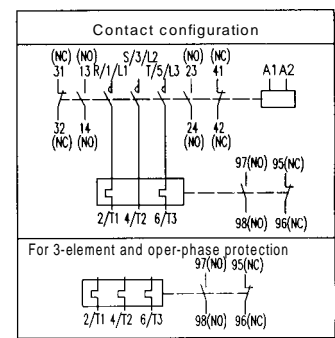
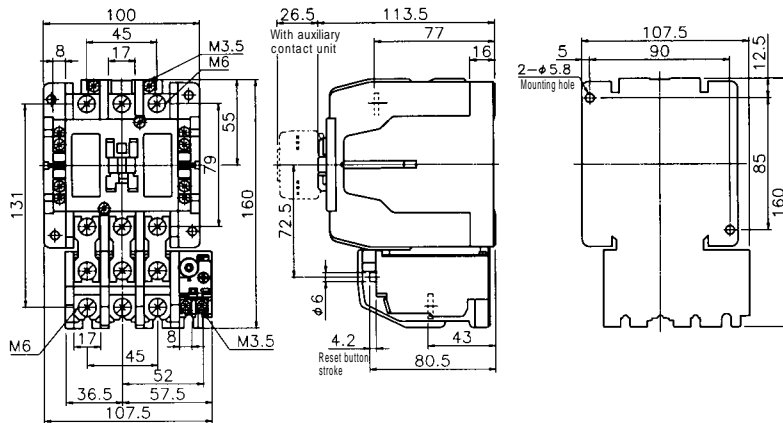
Applicable wire size and tightening torque					
		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m (kgf·cm)
Contactor	Main circuit	M6	2 ~ 38mm ² Using crimped terminals	2-6 38-6S	3.9 ~ 5.9 (40 ~ 60)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5	0.8 ~ 1.2 (8 ~ 12)
Thermal overload relay	Main circuit	M6	2 ~ 38mm ² Using crimped terminals	2-6 38-6S	3.9 ~ 5.9 (40 ~ 60)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5	0.8 ~ 1.2 (8 ~ 12)

Magnetic contactor (open type) PAK-50H · 65H



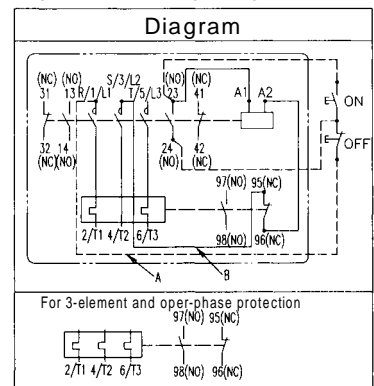
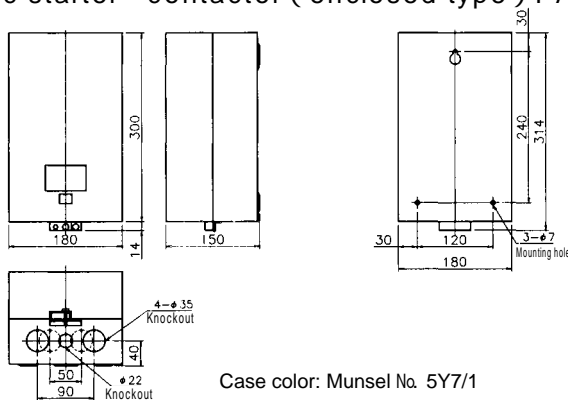
Weight 50H = 1.3kg , 65H = 1.5kg

Magnetic starter (open type) PAK-50HTC · 65HTC



Weight 50HTC = 1.7kg , 65HTC = 1.9kg

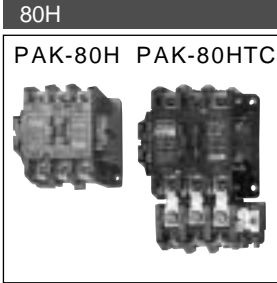
Magnetic starter · contactor (enclosed type) PAK-50HMC (HB) · 65HMC (HB)



Weight 50HMC = 3.78kg , 65HMC = 4.57kg
50HB = 3.38kg , 65HB = 4.17kg

Dashed lines are not connected.
Above diagram is for magnetic starter.

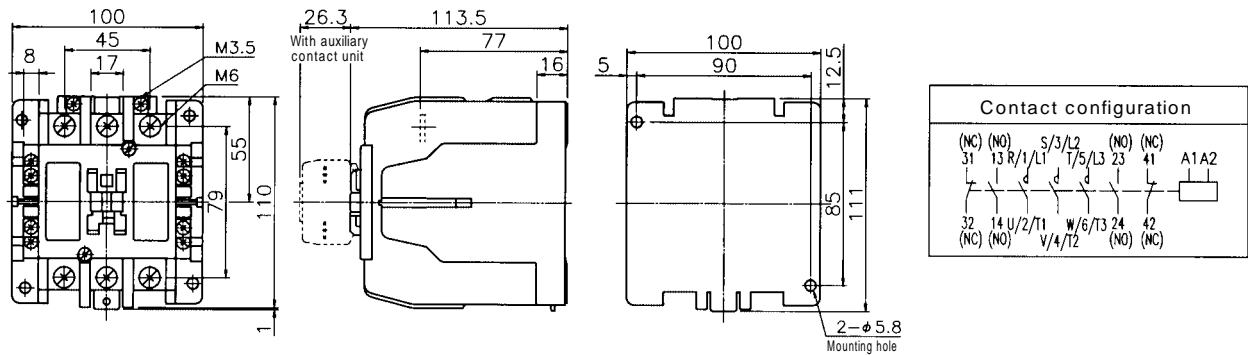
① If operating from other power source, remove " B ", and connect the supply to #95 and " A " on the pushbutton terminal.



Ratings			
Rated capacity	Frame		80H
	AC-3 (kW)	220V	22
		440V	45
		550V	45
	AC-1 (A) (500,000 ops)	220V	110
		440V	110
550V		110	

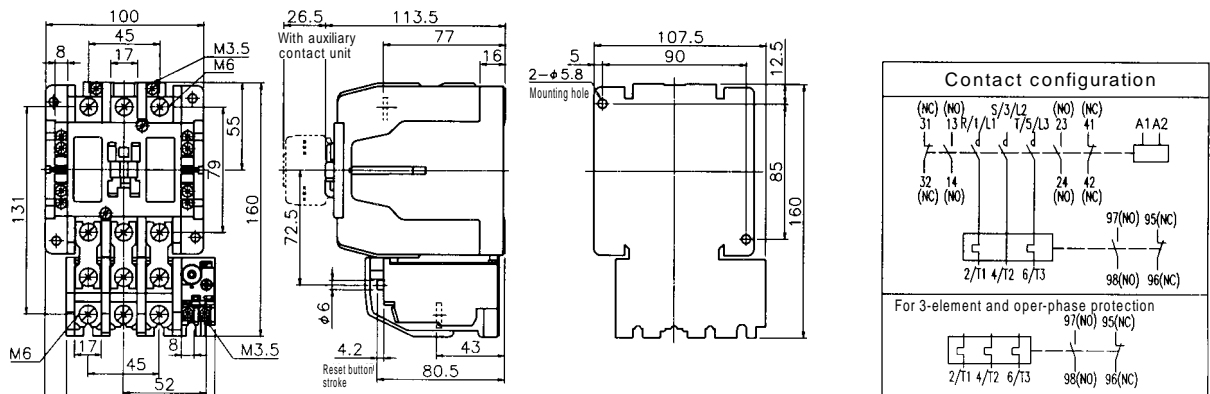
Applicable wire size and tightening torque					
		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m(kgf·cm)
Contactor	Main circuit	M6	2 ~ 38mm ² Using crimped terminals	2-6 38-6S	3.9 ~ 5.9 (40 ~ 60)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)
Thermal overload relay	Main circuit	M6	2 ~ 38mm ² Using crimped terminals	2-6 38-6S	3.9 ~ 5.9 (40 ~ 60)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)

Magnetic contactor (open type) PAK-80H



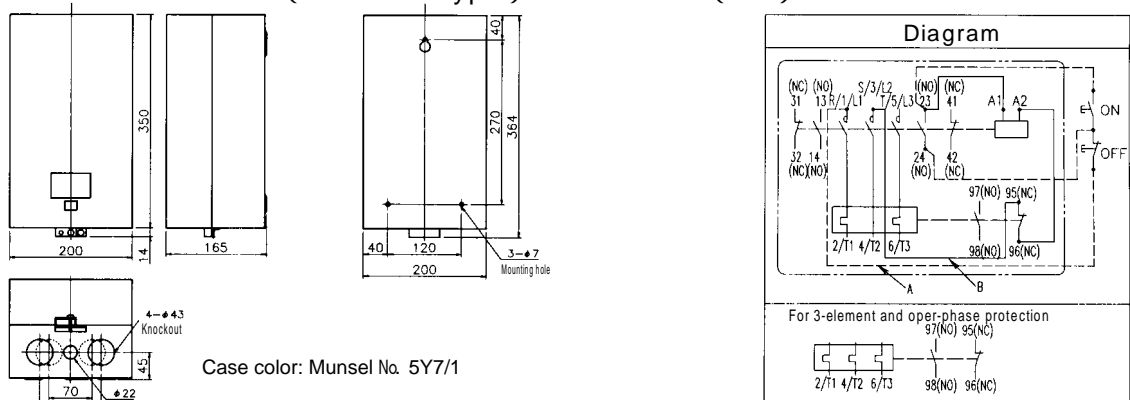
Weight 1.5kg

Magnetic starter (open type) PAK-80HTC



Weight 1.9kg

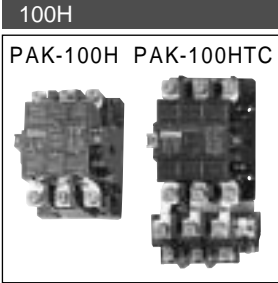
Magnetic starter · contactor (enclosed type) PAK-80HMC (HB)



Weight 80HMC = 4.57kg
80HB = 4.17kg

Dashed lines are not connected.
Above diagram is for magnetic starter.

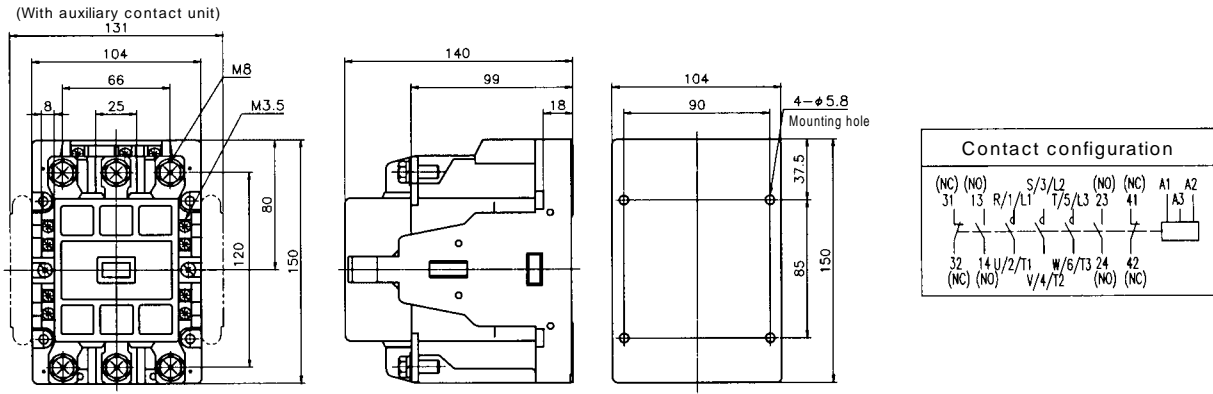
① If operating from other power source, remove " B ", and connect the supply to #95 and " A " on the pushbutton terminal.



Ratings		100H	
Rated capacity	AC-3 (kW)	220V	30
		440V	55
		550V	55
	AC-1 (A) (500,000 ops)	220V	150
		440V	150
		550V	150

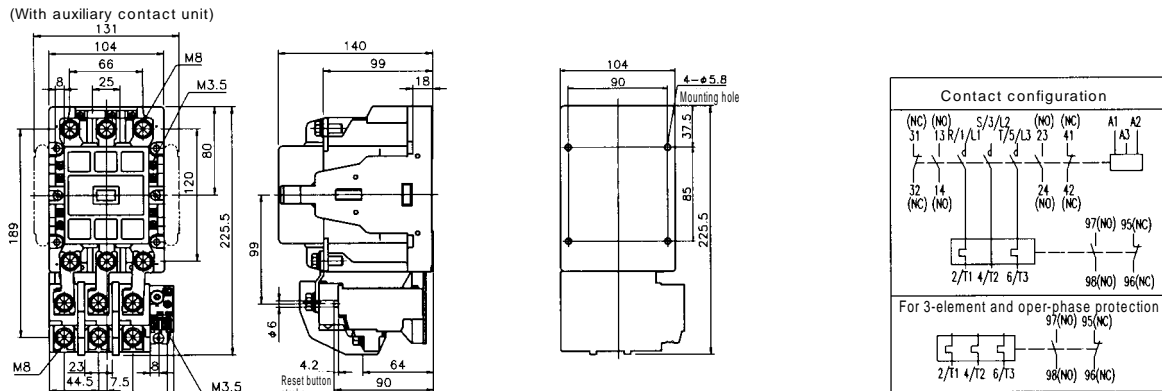
Applicable wire size and tightening torque					
		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m(kgf·cm)
Contactor	Main circuit	M8	2 ~ 80mm ² Using crimped terminals	2-8 CB80-8	9.0 ~ 13.5 (92 ~ 138)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)
Thermal overload relay	Main circuit	M8	2 ~ 80mm ² Using crimped terminals	2-8 CB80-8	9.0 ~ 13.5 (92 ~ 138)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)

Magnetic contactor (open type) PAK-100H



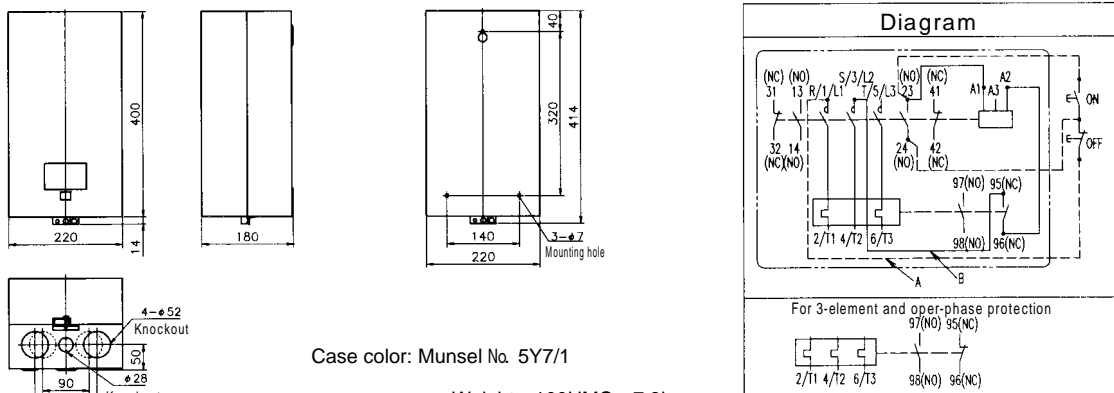
Weight 2.9kg

Magnetic starter (open type) PAK-100HTC



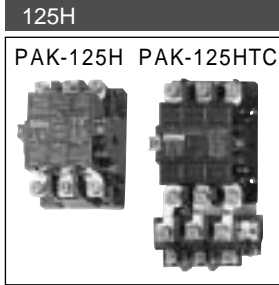
Weight 3.7kg

Magnetic starter · contactor (enclosed type) PAK-100HMC (HB)



Dashed lines are not connected.
Above diagram is for magnetic starter.

① If operating from other power source, remove " B ", and connect the supply to #95 and " A " on the pushbutton terminal.



Ratings		Frame	125H
Rated capacity	AC-3 (kW)	220V	37
		440V	60
		550V	70
	AC-1 (A) (500,000 ops)	220V	170
		440V	170
		550V	170

Applicable wire size and tightening torque					
		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m(kgf·cm)
Contactor	Main circuit	M8	2 ~ 80mm ² Using crimped terminals	2-8 CB80-8	9.0 ~ 13.5 (92 ~ 138)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)
Thermal overload relay	Main circuit	M8	2 ~ 80mm ² Using crimped terminals	2-8 CB80-8	9.0 ~ 13.5 (92 ~ 138)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)

Magnetic contactor (open type) PAK-125H

(With auxiliary contact unit)

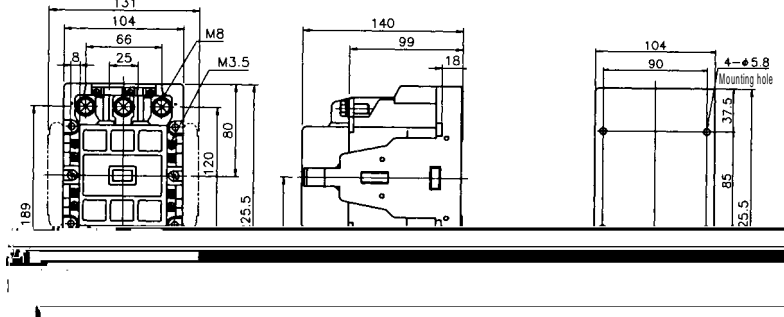
Mounting hole

Contact configuration

Weight 2.9kg

Magnetic starter (open type) PAK-125HTC

(With auxiliary contact unit)



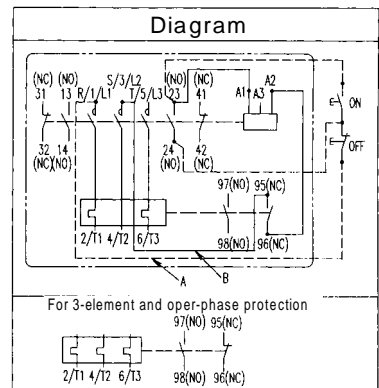
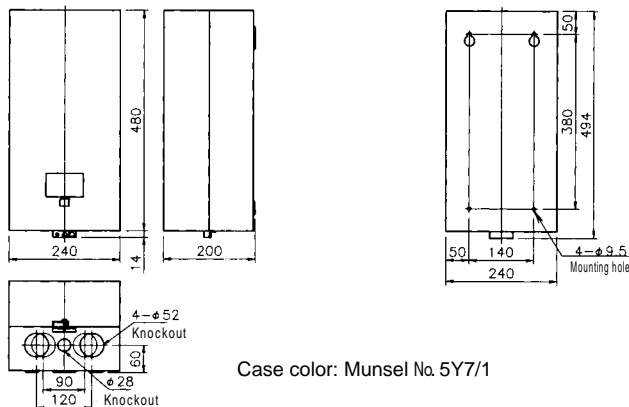
Contact configuration

For 3-element and open-phase protection

Reset button stroke

Weight 3.7kg

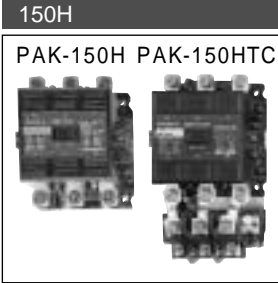
Magnetic starter · contactor (enclosed type) PAK-125HMC (HB)



Weight 125HMC = 9.6kg
125HB = 8.8kg

Dashed lines are not connected.
Above diagram is for magnetic starter.

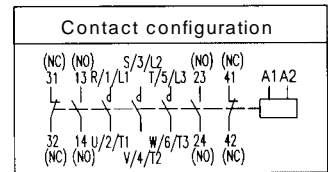
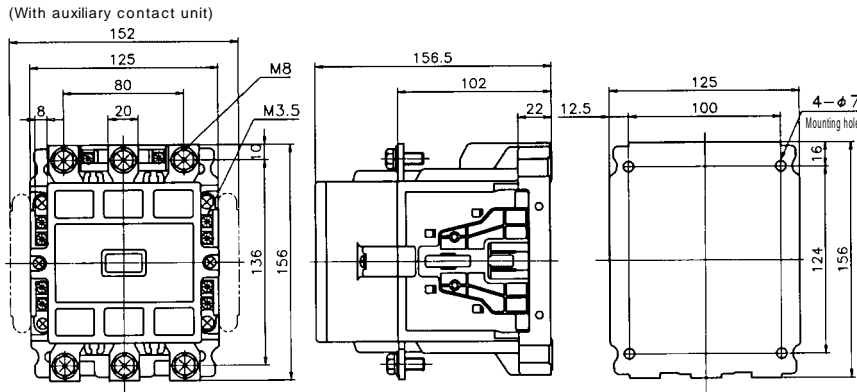
① If operating from other power source, remove " B ", and connect the supply to #95 and " A " on the pushbutton terminal.



Ratings		Frame	150H
Rated capacity	AC-3 (kW)	220V	55
		440V	75
		550V	75
	AC-1 (A) (500,000 ops)	220V	220
		440V	220
		550V	220

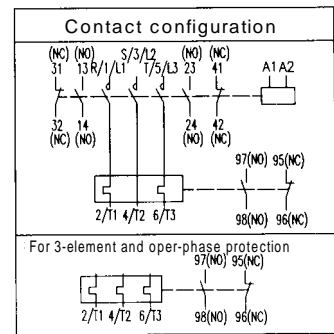
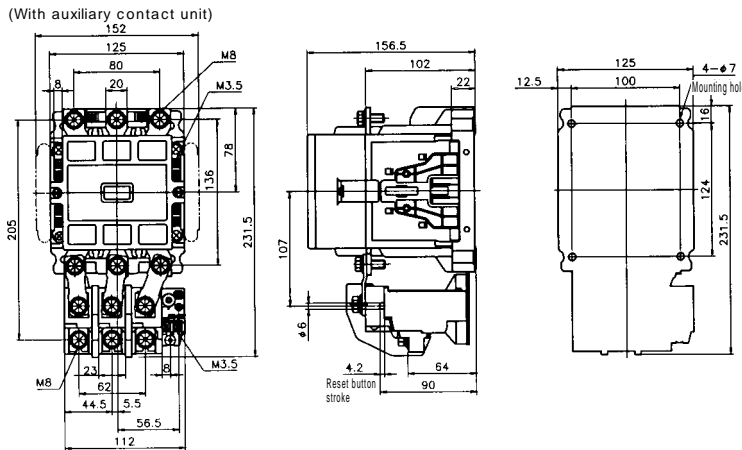
Applicable wire size and tightening torque					
		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m(kgf·cm)
Contactor	Main circuit	M8	2 ~ 100mm ² Using crimped terminals	2-8 CB100-8	9.0 ~ 13.5 (92 ~ 138)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)
Thermal overload relay	Main circuit	M8	2 ~ 100mm ² Using crimped terminals	2-8 CB100-8	9.0 ~ 13.5 (92 ~ 138)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)

Magnetic contactor (open type) PAK-150H



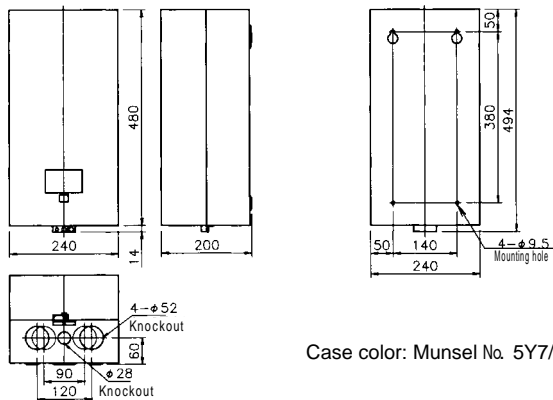
Weight 3.5kg

Magnetic starter (open type) PAK-150HTC

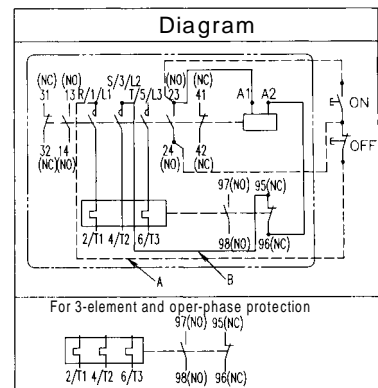


Weight 4.6kg

Magnetic starter · contactor (enclosed type) PAK-150HMC (HB)



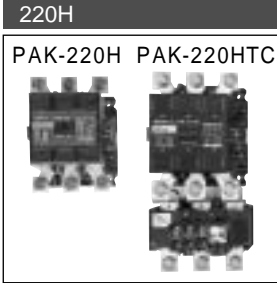
Case color: Munsel No. 5Y7/1



Weight 150HMC = 10.2kg
150HB = 9.7kg

Dashed lines are not connected.
Above diagram is for magnetic starter.

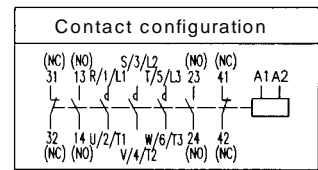
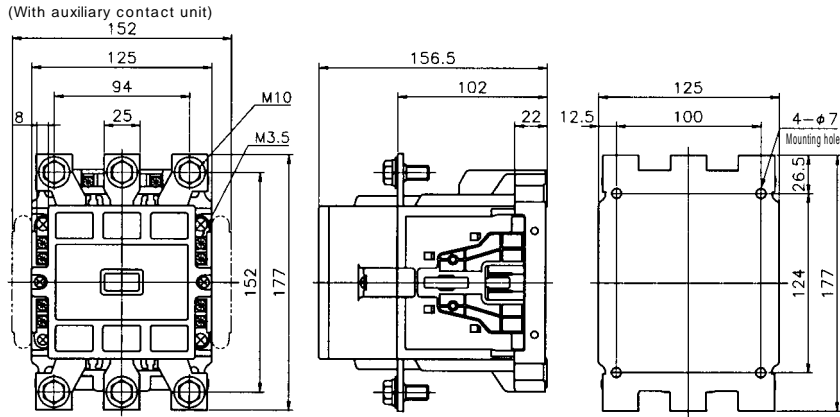
① If operating from other power source, remove " B ", and connect the supply to #95 and " A " on the pushbutton terminal.



Ratings		Frame	220H
Rated capacity	AC-3 (kW)	220V	75
		440V	95
		550V	95
AC-1 (A) (500,000 ops)	220V	275	
	440V	275	
	550V	275	

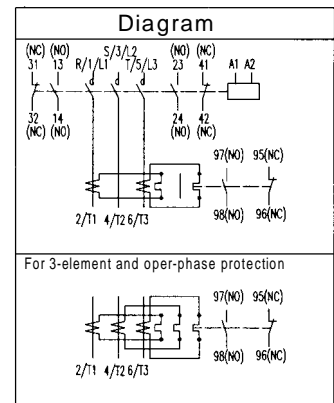
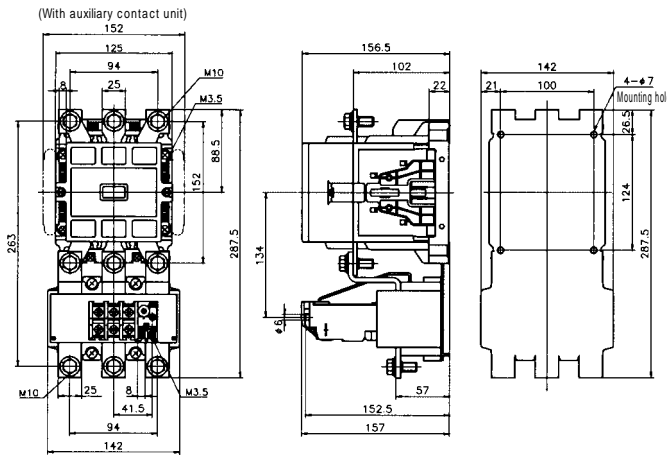
Applicable wire size and tightening torque					
		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m(kgf·cm)
Contactor	Main circuit	M10	2 ~ 150mm ² Using crimped terminals	2-10 150-10	18.1 ~ 27 (185 ~ 275)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)
Thermal overload relay	Main circuit	M10	2 ~ 150mm ² Using crimped terminals	2-10 150-10	18.1 ~ 27 (185 ~ 275)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)

Magnetic contactor (open type) PAK-220H



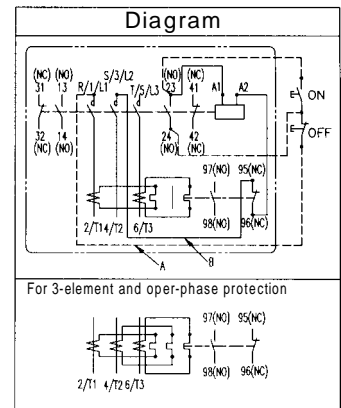
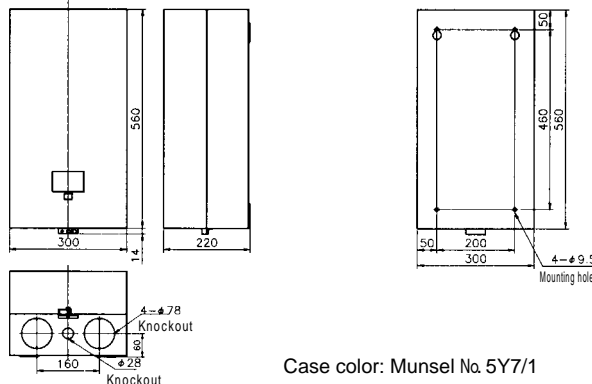
Weight 4.0kg

Magnetic starter (open type) PAK-220HTC



Weight 6.3kg

Magnetic starter (enclosed type) PAK-220HMC (HB)

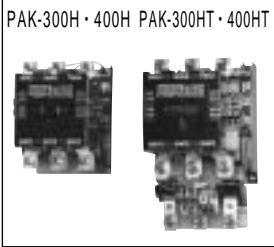


Weight 220HMC = 13.3kg
220HB = 11.0kg

Dashed lines not connected.
Above diagram for magnetic starter.

① If operating from other power source, remove " B " , and connect the supply to #95 and " A " on the pushbutton terminal.

300H · 400H



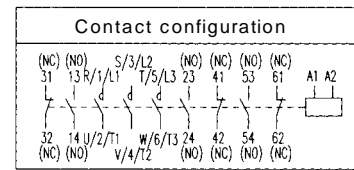
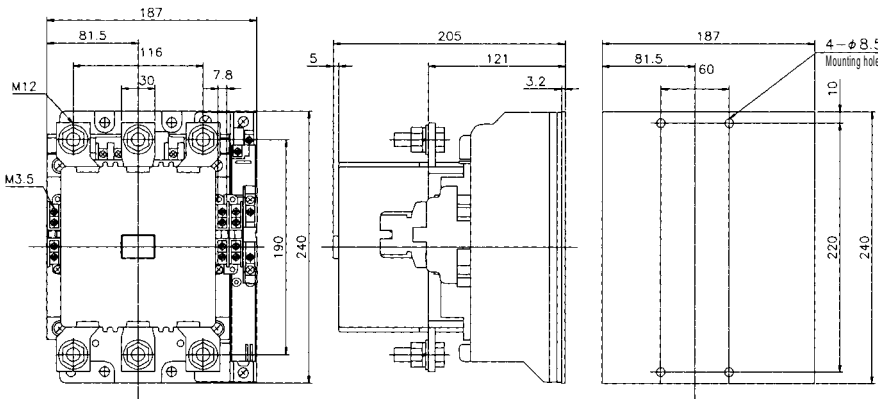
Ratings

Rated capacity	Frame		300H	400H
	AC-3 (kW)	220V	90	115
440V		150	200	
550V		160	-	
AC-1 (A) (500,000 ops)	220V	350	420	
	440V	350	420	
	550V	-	-	

Applicable wire size and tightening torque

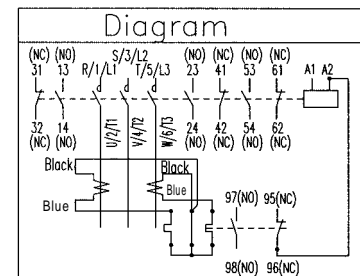
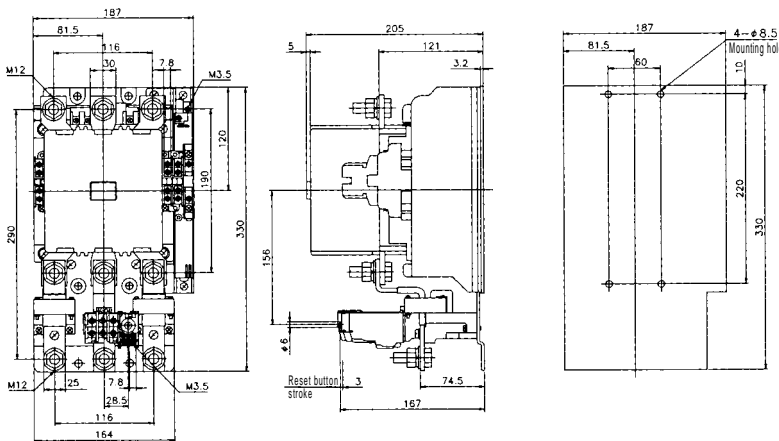
		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m (kgf·cm)
Contactor	Main circuit	M12	2 ~ 200mm ²	2-12 200-12	30.4 ~ 46.1 (310 ~ 470)
	Aux. circuit	M3.5	1 ~ 2 0.5 ~ 3.5mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)
Thermal overload relay	Main circuit	M12	2 ~ 200mm ²	2-12 200-12	30.4 ~ 46.1 (310 ~ 470)
	Aux. circuit	M3.5	1 ~ 1.6 0.5 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)

Magnetic contactor (open type) PAK-300H · 400H

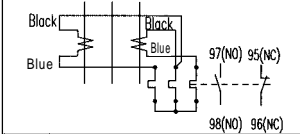


Weight 9.7kg

Magnetic starter (open type) PAK-300HT · 400HT

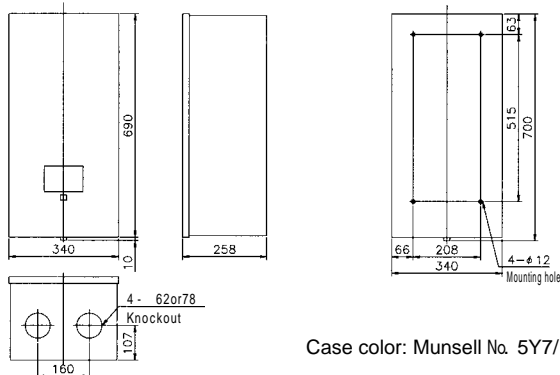


For oper-phase protection



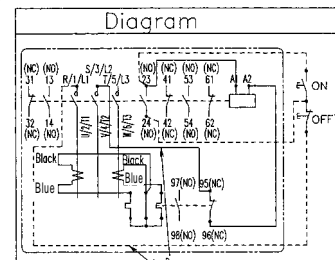
Weight 13kg

Magnetic starter (enclosed type) PAK-300HM(HB) · 400HM(HB)

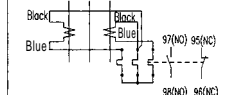


Case color: Munsell No. 5Y7/1

Weight 300HM · 400HM=25kg
300HB · 400HB=22kg

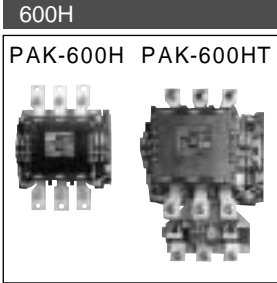


For oper-phase protection



Dashed lines not connected.
Above diagram for magnetic starter.

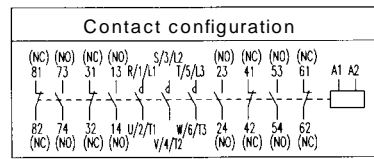
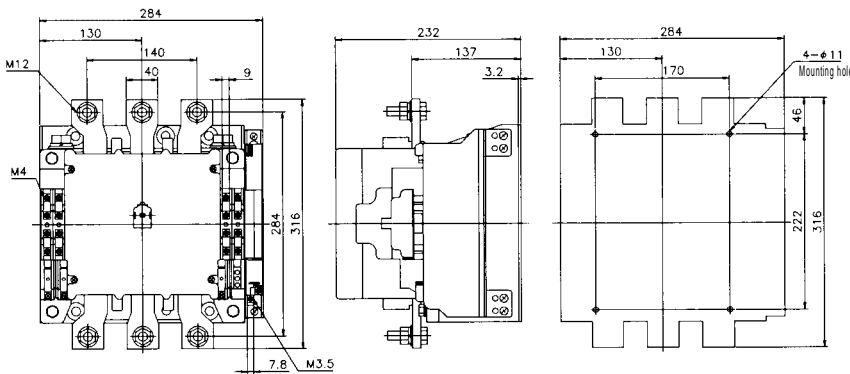
① If operating from other power source, remove " B ", and connect the supply to #95 and " A " on the pushbutton terminal.



Ratings		600H
Rated capacity	Frame	600H
		AC-3 (kW)
		220V 160
	440V 300	
	550V 300	
AC-1 (A) (500,000 ops)	220V 600	
	440V 600	
	550V -	

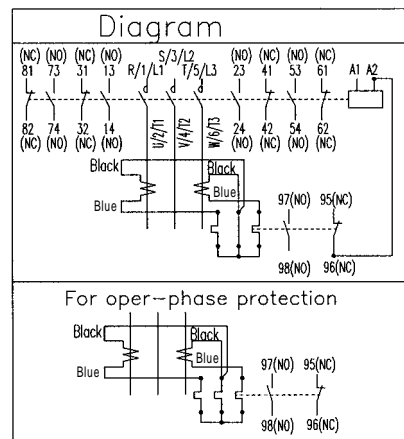
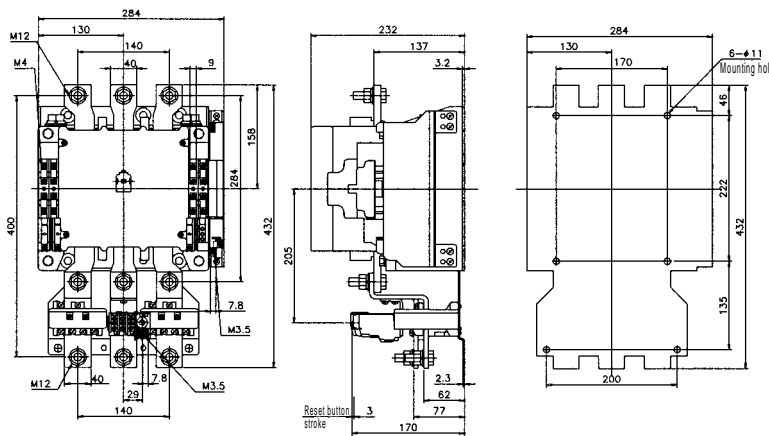
Applicable wire size and tightening torque					
		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m(kgf·cm)
Contactor	Main circuit	M12	2 ~ 200mm ²	2-12 200-12	30.4 ~ 46.1 (310 ~ 470)
	Aux. circuit	M4 M3.5	1.6 1.25 ~ 2mm ²	1.25-4 2-4	1.2 ~ 1.8 (12 ~ 18)
Thermal overload relay	Main circuit	M12	2 ~ 200mm ²	2-12 200-12	30.4 ~ 46.1 (310 ~ 470)
	Aux. circuit	M3.5	1.6 1.25 ~ 2mm ²	1.25-3.5 2-3.5	0.8 ~ 1.2 (8 ~ 12)

Magnetic contactor (open type) PAK-600H



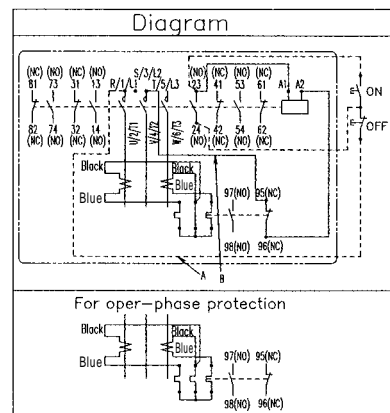
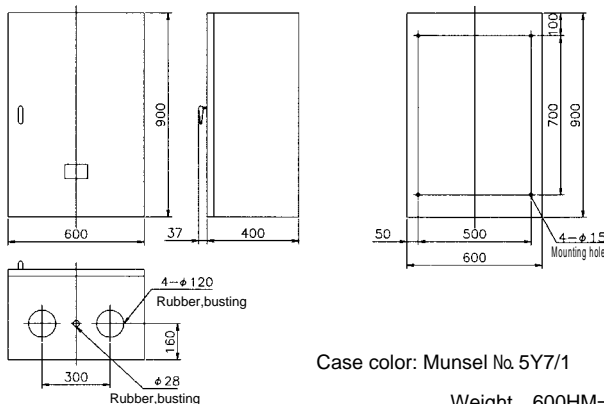
Weight 22kg

Magnetic starter (open type) PAK-600HT



Weight 28kg

Magnetic starter (enclosed type) PAK-600HM(HB)



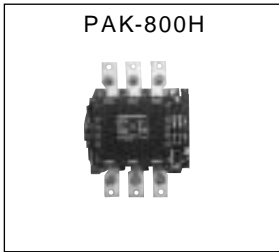
Dashed lines are not connected.
Above diagram is for magnetic starter.

① If operating from other power source, remove " B ", and connect the supply to #95 and " A " on the pushbutton terminal.

800H

Ratings

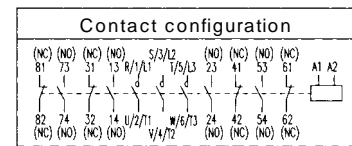
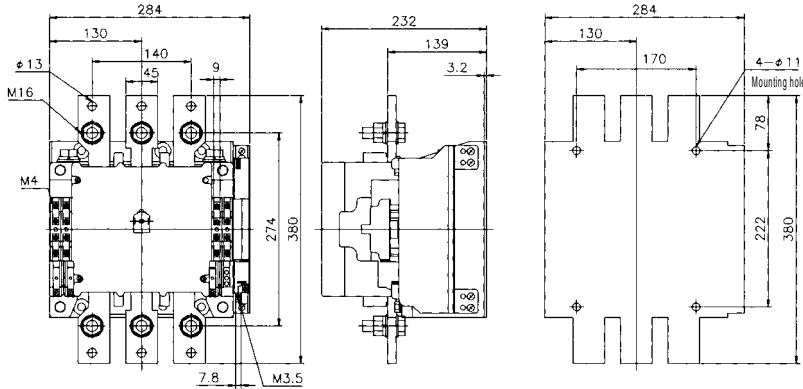
Applicable wire size and tightening torque



Rated capacity	Frame		800H
	AC-2 (kW)	220V	
440V			400
550V			-
AC-1 (A) (100,000 ops)	220V		800
	440V		800
	550V		-

Contactor		Screw size	Applicable wire size	Applicable terminal connector	Tightening torque N·m(kgf·cm)
		Main circuit	M16	2 ~ 325mm ²	2-16 325-16
Aux. circuit	M4	1 ~ 2 0.5 ~ 3.5mm ²	1.25-4 2-4	1.2 ~ 1.8 (12 ~ 18)	

Magnetic contactor (open type) PAK-800H



Weight 25kg