

Magnetic Contactors and Starters

SC and SW series

Reversing standard type

Reversing standard type contactors and starters

■ Description

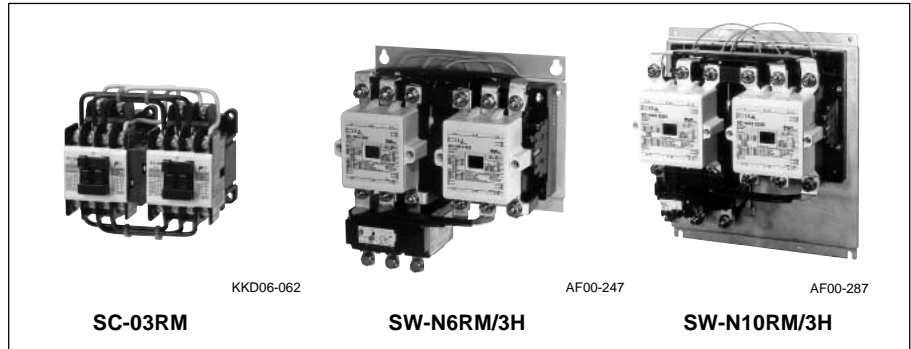
The reversing starter consists of two magnetic contactors and a thermal overload relay. They are suitable for across-the-line starting and reversing of 3-phase squirrel-cage rotor and slip-ring motors.

This starter is provided with a built-in "perfect interlock safety mechanism" which prevents the engagement of forward-reverse contactors simultaneously, as well as electrical interlock.

Where there is a danger of forward-reverse being engaged at the same time, i.e., in the case of power source switching, hoist or machine tool controls, etc. then this type is recommended. The action is simple and positive, and free from trouble in operation.

■ Operating mechanism

When one contactor begins to move the other contactor is locked in position. An arm is used to actuate each contactor so that there is no possibility of double engagement.



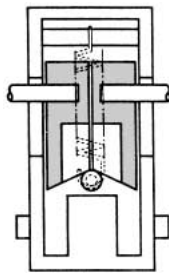
■ Ratings of auxiliary contact and coil:

See pages 01/20 and 01/22.

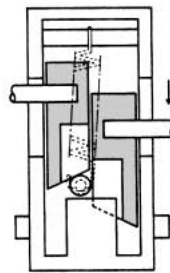
■ Performance data:

Same as standard open type. See page 01/22.

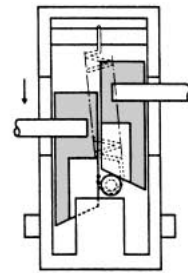
Mechanism principle (Explanation only)



Both contactors open position



Forward contactor closed position



Reverse contactor closed position

■ Ordering information

Specify the following:

1. Ordering code
2. Overload relay setting range code
3. Operating coil voltage code
4. Auxiliary contact arrangement as shown in the table below.

Example: (2NO + 2NC) × 2

■ Types and ratings

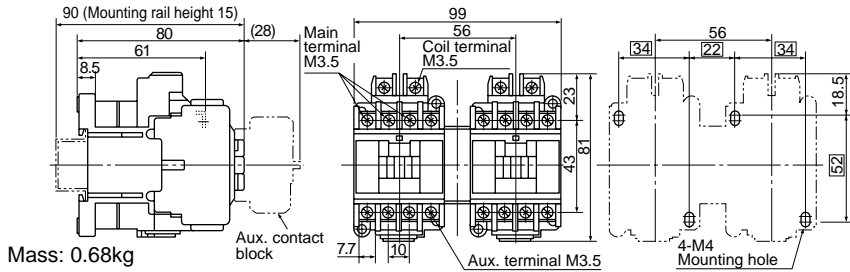
Max. motor capacity (kw)	Rated operation current (A)		Auxiliary contact	Contactor		Starter (3-element)				
	200V	380V		Open Type	Ordering code	Open Type	Ordering code	Enclosed Type	Ordering code	
2.5	4	11	9	1NC×2*1	SC-03RM	SC11RA-■01	SW-03RM/3H	SC11RAN-■01T□□	SW-03RMC/3H	SC11MAN-■01T□□
3.5	5.5	13	12	1NC×2*1	SC-0RM	SC13RA-■01	SW-0RM/3H	SC13RAN-■01T□□	SW-0RMC/3H	SC13MAN-■01T□□
3.5	5.5	13	12	(1NO+1NC)×2*2	SC-05RM	SC14RA-■11	SW-05RM/3H	SC14RAN-■11T□□	SW-05RMC/3H	SC14MAN-■11T□□
4.5	7.5	18	16	1NC×2*1	SC-4-0RM	SC18RA-■01	SW-4-0RM/3H	SC18RAN-■01T□□	SW-4-0RMC/3H	SC18MAN-■01T□□
5.5	11	22	22	1NC×2*1	SC-4-1RM	SC19RA-■01	SW-4-1RM/3H	SC19RAN-■01T□□	SW-4-1RMC/3H	SC19MAN-■01T□□
5.5	11	22	22	(1NO+1NC)×2*3	SC-5-1RM	SC20RA-■11	SW-5-1RM/3H	SC20RAN-■11T□□	SW-5-1RMC/3H	SC20MAN-■11T□□
7.5	15	32	32	(2NO+2NC)×2*3	SC-N1RM	SC25BRA-■22	SW-N1RM/3H	SC25BRAN-■22T□□	SW-N1RMC/3H	SC25BMAN-■22T□□
11	18.5	40	40	(2NO+2NC)×2*3	SC-N2RM	SC35BRA-■22	SW-N2RM/3H	SC35BRAN-■22T□□	SW-N2RMC/3H	SC35BMAN-■22T□□
15	22	50	50	(2NO+2NC)×2*3	SC-N2SRM	SC50BRA-■22	SW-N2SRM/3H	SC50BRAN-■22T□□	SW-N2SRMC/3H	SC50BMAN-■22T□□
18.5	30	65	65	(2NO+2NC)×2*3	SC-N3RM	SC65BRA-■22	SW-N3RM/3H	SC65BRAN-■22T□□	SW-N3RMC/3H	SC65BMAN-■22T□□
22	40	80	80	(2NO+2NC)×2*3	SC-N4RM	SC80BRA-■22	SW-N4RM/3H	SC80BRAN-■22T□□	SW-N4RMC/3H	SC80BMAN-■22T□□
30	55	105	105	(2NO+2NC)×2*3	SC-N5ARM	SC93CRA-■22	SW-N5ARM/3H	SC93CRAN-■22T□□	SW-N5ARMC/3H	SC93CMAN-■22T□□
37	60	125	125	(2NO+2NC)×2*3	SC-N6RM	SC1CBRA-■22	SW-N6RM/3H	SC1CBRAN-■22T□□	SW-N6RMC/3H	SC1CBMAN-■22T□□
45	75	150	150	(2NO+2NC)×2*3	SC-N7RM	SC1FBRA-■22	SW-N7RM/3H	SC1FBRAN-■22T□□	SW-N7RMC/3H	SC1FBMAN-■22T□□
55	90	180	180	(2NO+2NC)×2*3	SC-N8RM	SC1JBRA-■22	SW-N8RM/3H	SC1JBRAN-■22T□□	SW-N8RMC/3H	SC1JBMAN-■22T□□
65	110	220	220	(2NO+2NC)×2*3	SC-N10RM	SC2CBRA-■22	SW-N10RM/3H	SC2CBRAN-■22T□□	SW-N10RMC/3H	SC2CBMAN-■22T□□
90	160	300	300	(2NO+2NC)×2*3	SC-N11RM	SC3ABRA-■22	SW-N11RM/3H	SC3ABRAN-■22T□□		
120	220	400	400	(2NO+2NC)×2*3	SC-N12RM	SC4ABRA-■22	SW-N12RM/3H	SC4ABRAN-■22T□□		
180	315	600	600	(2NO+2NC)×2*3	SC-N14RM	SC6ABRA-■22	SW-N14RM/3H	SC6ABRAN-■22T□□		

Notes: 1. ■ : Coil voltage code. □ : Thermal overload relay ampere setting range code. See page 01/19.
2. *1: Auxiliary contact 1NO×2 is available on request. However, these contactors are not electrically interlocked. Be sure to arrange electrical interlock circuit externally to avoid short-circuit accidents.

*2: Auxiliary contact 2NC×2 is available on request.
*3: Auxiliary contact (3NO+3NC)×2 is available on request for frame size N1 and above. Auxiliary contact (4NO+4NC)×2 is available on request for frame size N1 to N3.
3. Contactor with enclosure is available on request.

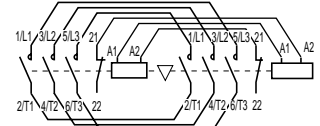
■ Dimensions, mm
 Reversing contactors/Open type

SC-03RM, SC-0RM

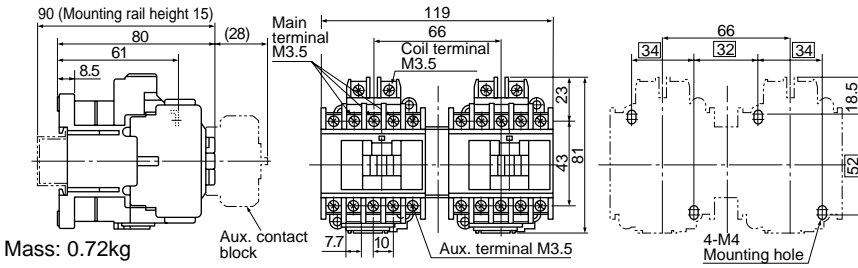


Mass: 0.68kg

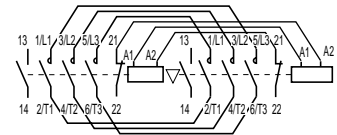
■ Wiring diagrams



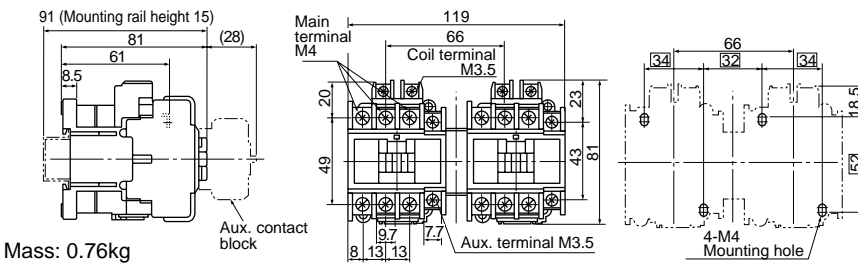
SC-05RM



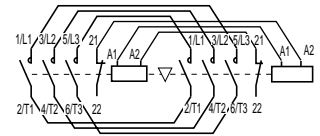
Mass: 0.72kg



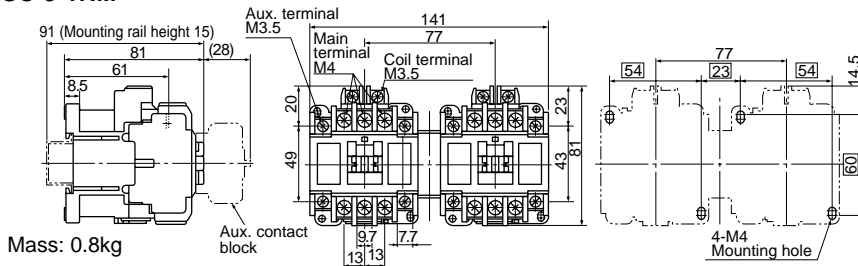
SC-4-0RM, SC-4-1RM



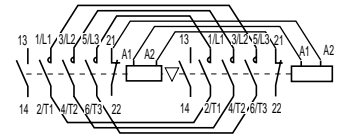
Mass: 0.76kg



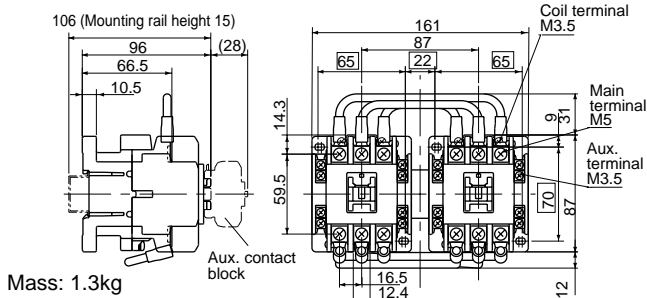
SC-5-1RM



Mass: 0.8kg



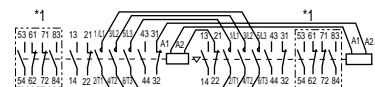
SC-N1RM, SC-N2RM



Mass: 1.3kg

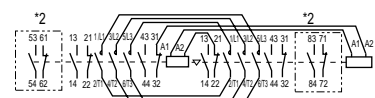
■ Wiring diagrams

SC-N1RM to SC-N3RM



*1 In case of auxiliary contact 4NO+4NC

SC-N4RM to SC-N14RM



*2 In case of auxiliary contact 3NO+3NC

Magnetic Contactors and Starters

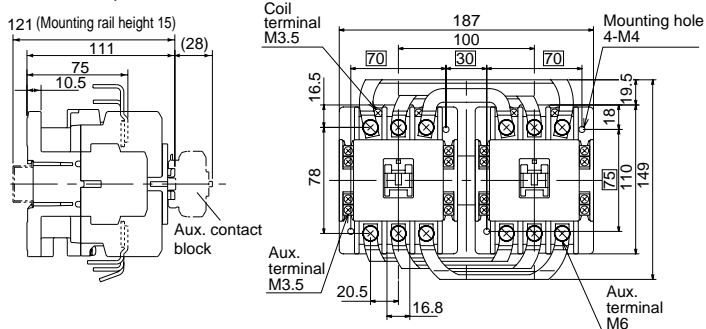
SC and SW series

Reversing standard type

■ Dimensions, mm

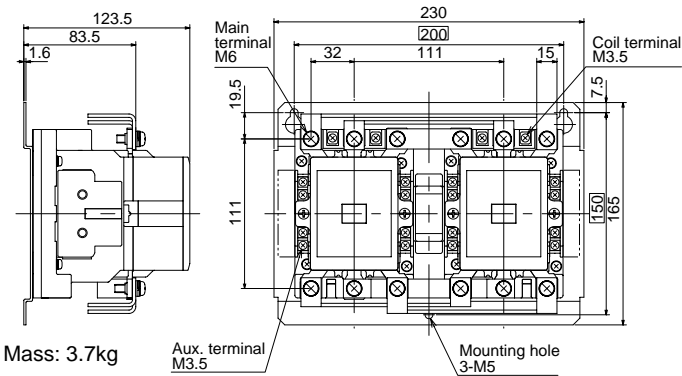
Reversing contactors/Open type

SC-N2SRM, SC-N3RM



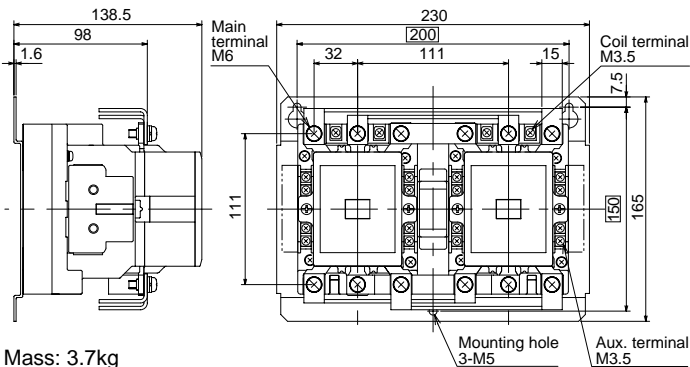
Mass: 2.3kg

SC-N4RM



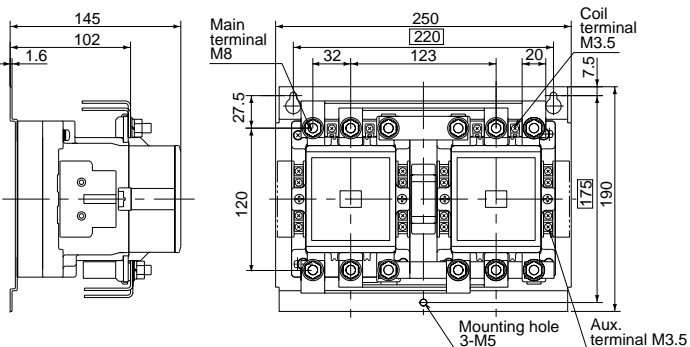
Mass: 3.7kg

SC-N5ARM



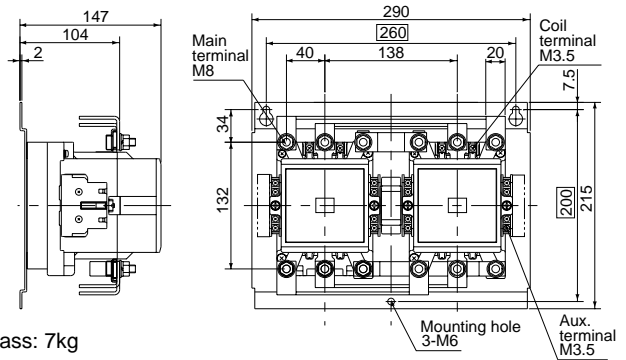
Mass: 3.7kg

SC-N6RM



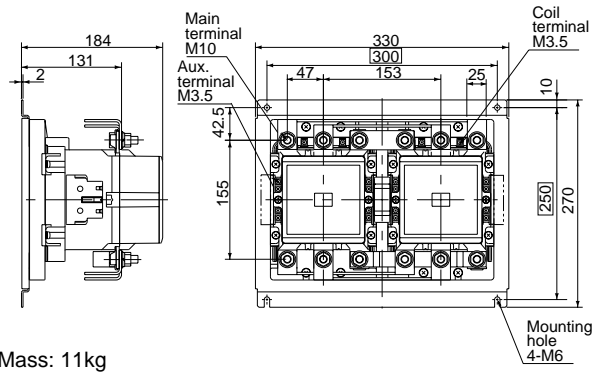
Mass: 5.9kg

SC-N7RM



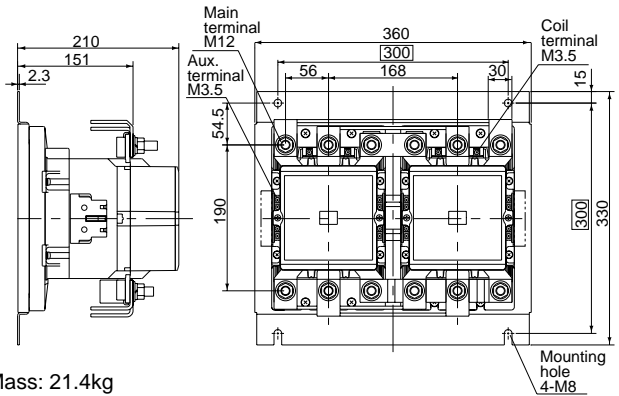
Mass: 7kg

SC-N8RM, SC-N10RM



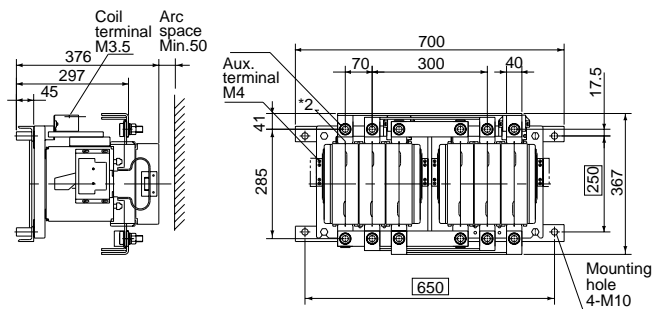
Mass: 11kg

SC-N11RM, SC-N12RM



Mass: 21.4kg

SC-N14RM

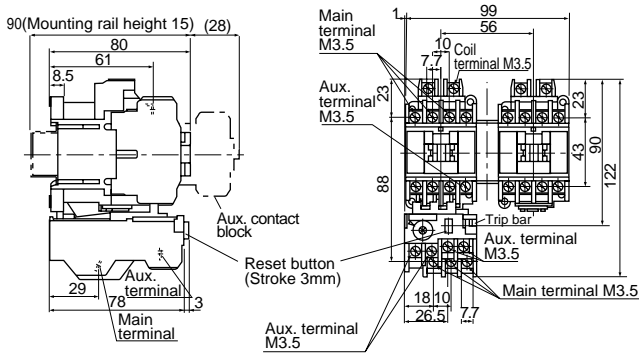


Mass: 80kg

*2 M4 tap for control circuit

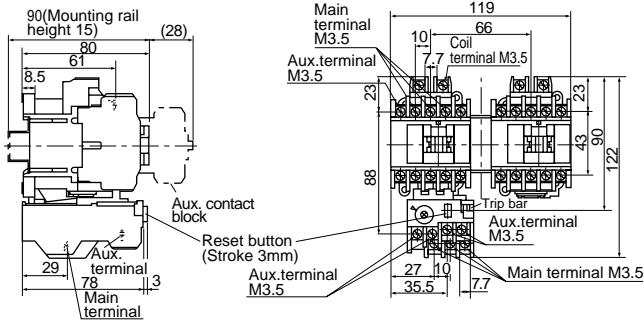
■ Dimensions, mm
 Reversing motor starters/Open type

SW-03RM/3H, SW-0RM/3H



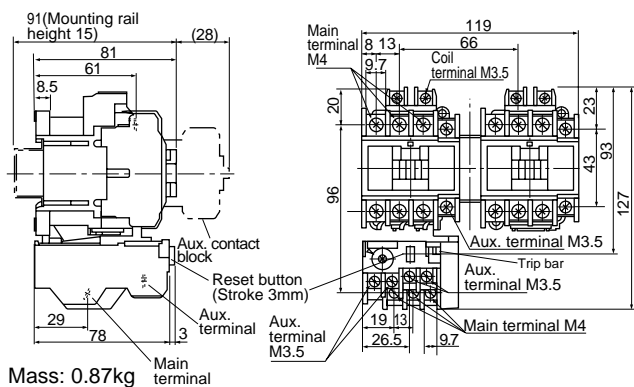
Mass: 0.79kg

SW-05RM/3H



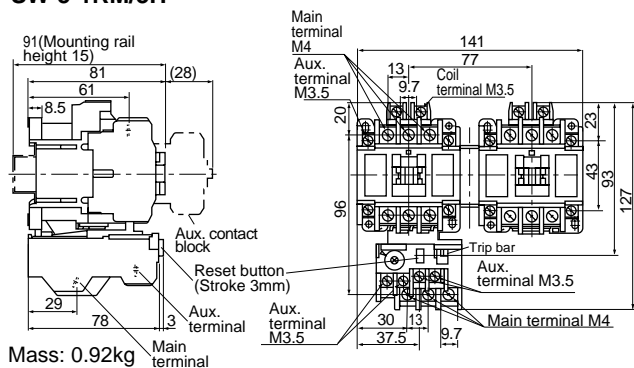
Mass: 0.83kg

SW-4-0RM/3H, SW-4-1RM/3H



Mass: 0.87kg

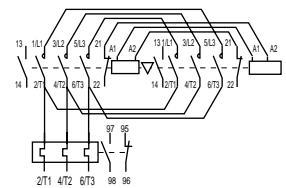
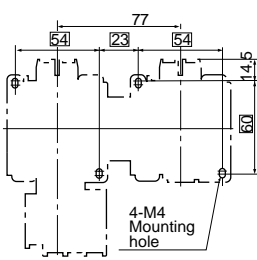
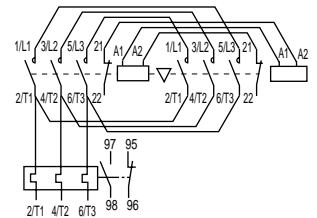
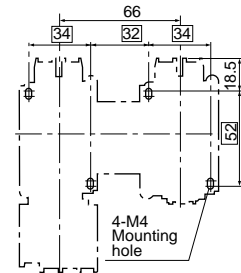
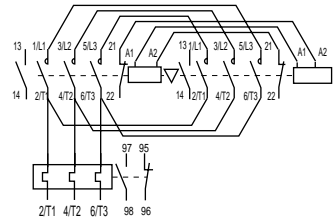
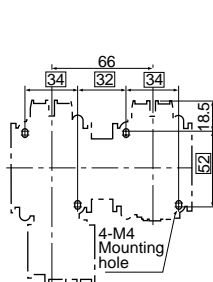
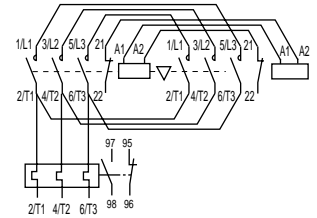
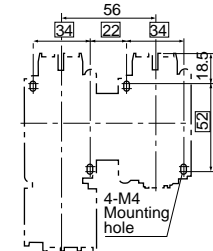
SW-5-1RM/3H



Mass: 0.92kg

■ Wiring diagrams

Panel drilling



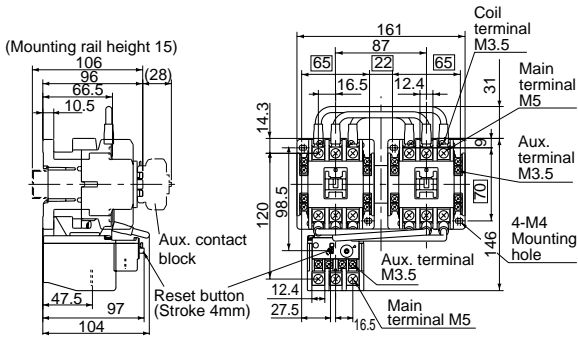
Magnetic Contactors and Starters

SC and SW series

Reversing standard type

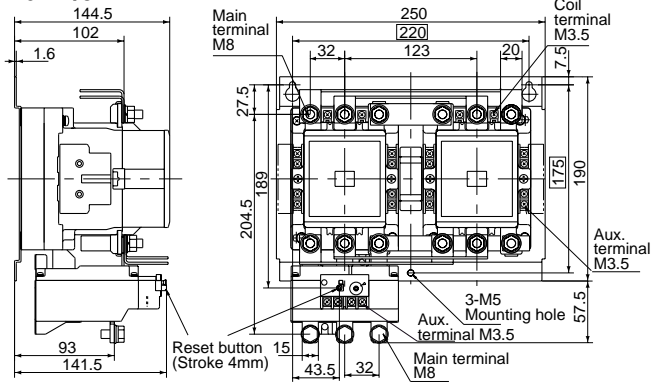
■ Dimensions, mm
Reversing motor starters/Open type

SW-N1RM/3H, SW-N2RM/3H



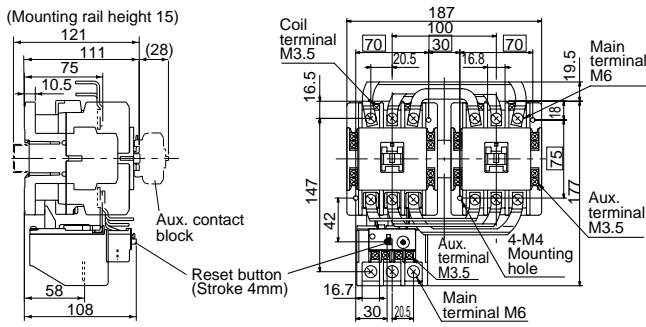
Mass: 1.5kg

SW-N6RM/3H



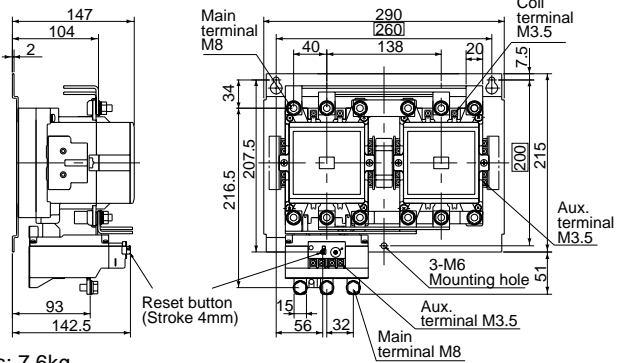
Mass: 6.5kg

SW-N2SRM/3H, SW-N3RM/3H



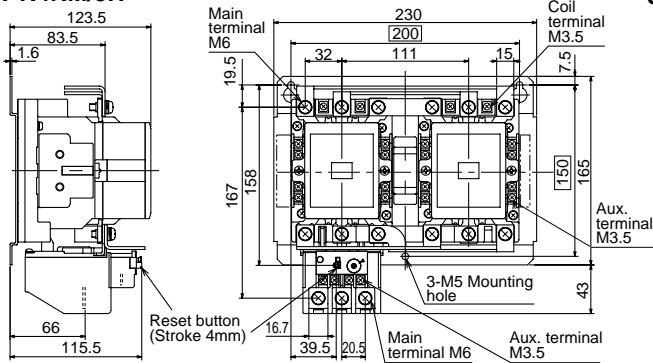
Mass: 2.6kg

SW-N7RM/3H



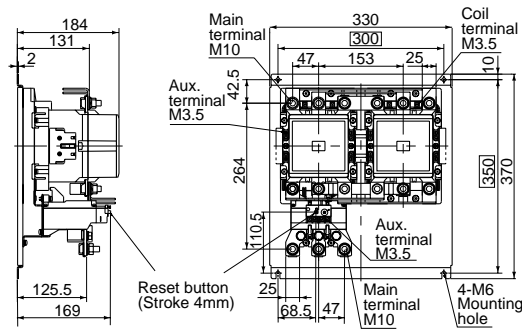
Mass: 7.6kg

SW-N4RM/3H



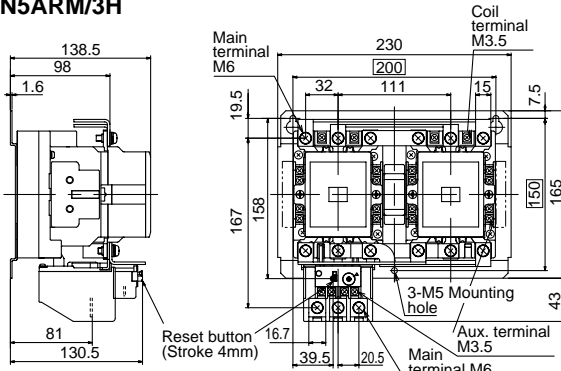
Mass: 4kg

SW-N8RM/3H



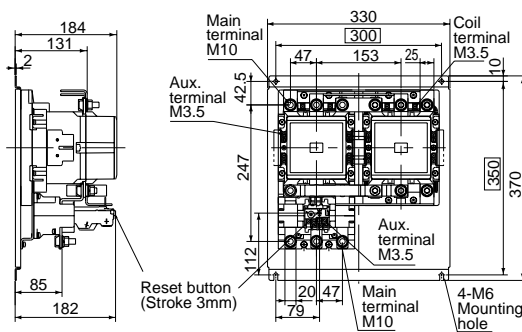
Mass: 12.2kg

SW-N5ARM/3H



Mass: 4kg

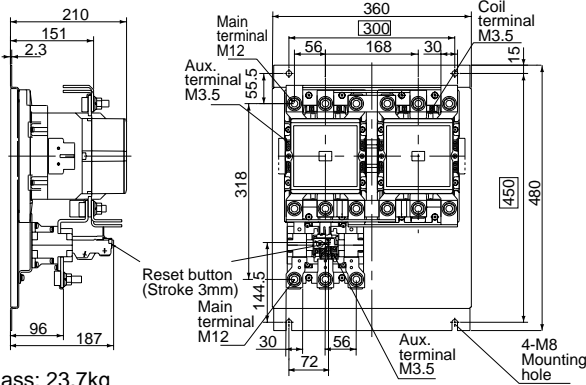
SW-N10RM/3H



Mass: 12.9kg

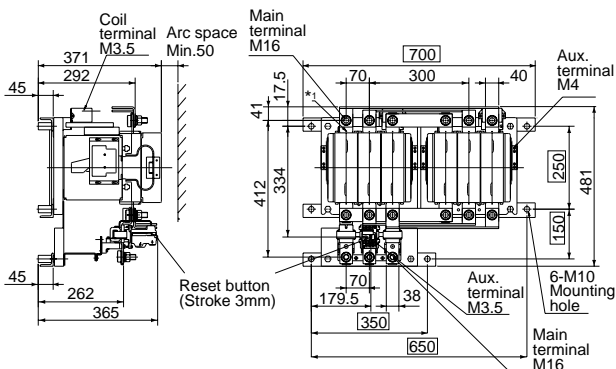
■ Dimensions, mm
 Reversing motor starters/Open type

SW-N11RM/3H, SW-N12RM/3H



Mass: 23.7kg

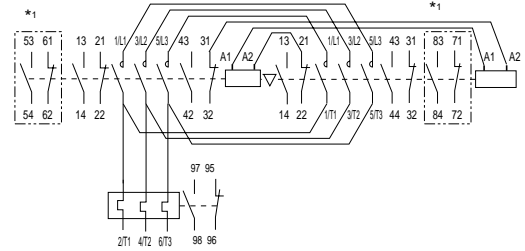
SW-N14RM/3H



Mass: 85kg

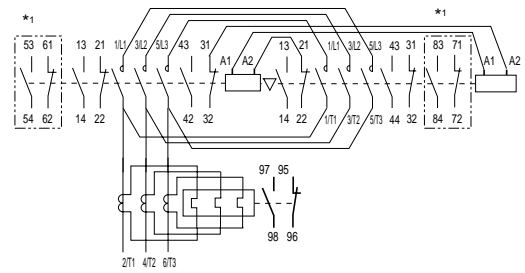
*1 M4 tap for control circuit

■ Wiring diagrams
 SW-N1RM/3H to SW-N8RM/3H



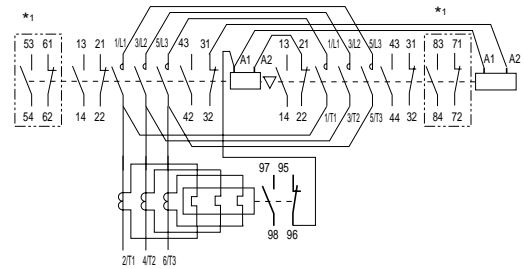
*1 In case of auxiliary contact 3NO+3NC

SW-N10RM/3H to SW-N12RM/3H



*1 In case of auxiliary contact 3NO+3NC

SW-N14RM/3H



*1 In case of auxiliary contact 3NO+3NC

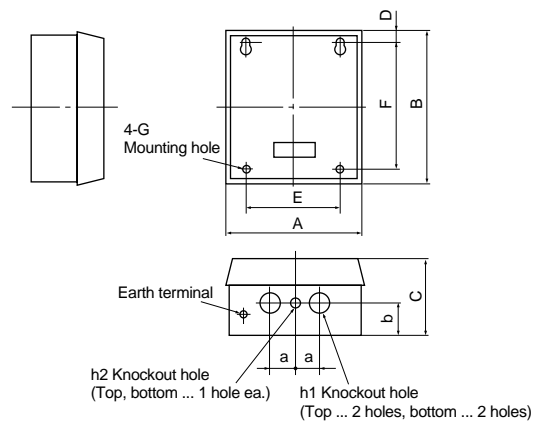
Magnetic Contactors and Starters

SC and SW series

Reversing standard type

■ Dimensions, mm

Reversing motor starters/Enclosed type



Type	A	B	C	D	E	F	G	h1	h2	a	b	Mass (kg) 3-element
SW-03RMC/3H	192	192	100	16	130	160	4-M6	φ22	—	65	65	1.9
SW-0RMC/3H	192	192	100	16	130	160	4-M6	φ22	—	65	65	1.9
SW-05RMC/3H	192	192	100	16	130	160	4-M6	φ22	—	65	65	1.9
SW-4-0RMC/3H	192	192	100	16	130	160	4-M6	φ22	—	65	65	1.95
SW-4-1RMC/3H	192	192	100	16	130	160	4-M6	φ22	—	65	65	1.95
SW-5-1RMC/3H	192	192	100	16	130	160	4-M6	φ22	—	65	65	2.0
SW-N1RMC/3H	254	250	131	20	185	210	4-M6	φ28	—	80	70	3.8
SW-N2RMC/3H	254	250	131	20	185	210	4-M6	φ28	—	80	70	3.8
SW-N2SRMC/3H	280	320	145	35	200	250	4-M6	φ35	φ28	55	70	6.6
SW-N3RMC/3H	280	320	145	35	200	250	4-M6	φ35	φ28	55	70	6.6
SW-N4RMC/3H	355	400	160	37.5	250	325	4-M8	φ43	φ28	65	80	10.7
SW-N5ARMC/3H	355	400	160	37.5	250	325	4-M8	φ43	φ28	65	80	11.4
SW-N6RMC/3H	400	450	180	50	300	350	4-M8	φ52	φ28	85	80	14.3
SW-N7RMC/3H	450	560	210	55	350	450	4-M10	φ65	φ28	90	95	21.5
SW-N8RMC/3H	500	670	225	85	400	500	4-M10	φ78	φ28	90	105	29.4
SW-N10RMC/3H	500	670	225	85	400	500	4-M10	φ78	φ28	90	105	32.4

Notes: • SW-5-1RMC/3H with aux. contact 2×2NO:2NC is not available.
 • Dimensions of enclosed type contactor SC-03RMC to SC-N10RMC/3H are same as those of starters. Contact FUJI for mass.