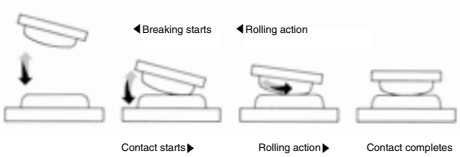
■Rolling action of contact mechanism improves contact stability

In the contact mechanism, the movable contact makes contact with the stationary contact at one point and then gradually increases the contact area while rolling on it. This rolling action minimizes the part exposed to the arc that is generated at the first contact or breaking, thereby maintaining much higher contact stability than the former product.



SPECIFICATIONS (RATINGS, PERFORMANCE)

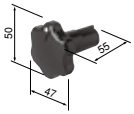
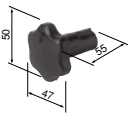
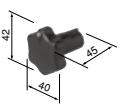
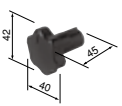
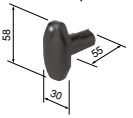
Specification \ Type	B TYPE	BH TYPE
Rated insulation voltage (Ui)	600V	
Rated current-carrying capacity (Ith)	20A	
Max. wire size	5.5mm²	
Screw size	M4×9	
Withstand voltage	2,500V AC / 1 min.	
Lightning impulse	±7kV (1.2 / 50μs)	
Contact resistance	50mΩ or less	
Mechanical life	5,000,000 operations or more, Class 1	
Electrical life	500,000 operations or more, Class 1	
Shock resistance	500m/s² or more (6 directions)	
Vibration resistance	Range of vibration : 10 to 150Hz, Acceleration : 20m/s², Time : 1 hour (3 directions)	
Min. power requirements	5V AC 500mA, 5V DC 100mA (operating environment must be good)	
Operating temperature	–20 to 60°C	
Storing temperature	–40 to 70°C	
Altitude	2,000 m or less	

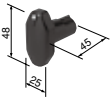
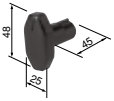
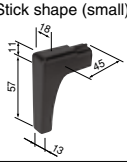
■Breaking capacity [electrical life of 500,000 operations (class 1)]

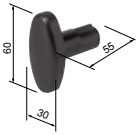
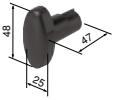
AC			DC				
Rated voltage (V)	Rated operating current (resistance load) (A)	Rated operating current (inductive load) (A)	Rated voltage (V)	Rated operating current (resistance load) (A)	Rated operating current (inductive load) (A)	2 contacts used in series Rated operating current (resistance load) (A)	2 contacts used in series Rated operating current (inductive load) (A)
110	20	15	24	15	10	20	20
220	15	10	48	10	6	18	15
440	4	3	110	3	1.5	4.5	4
——	——	——	220	1.2	0.8	2	1.5

∗ Inductive load: For AC: Power factor 0.6 to 0.7 (Class: AC11)
For DC: Time constant 40±6 ms (Class: DC12)

■Handle code

Code	LDP	LD	HDP	HD	LFP
Shape	Rose shape (large) with one point 	Rose shape (large) 	Rose shape (small) with one point 	Rose shape (small) 	Octagonal shape (large) with one point 

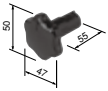
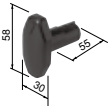
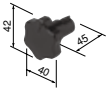
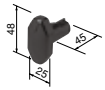
Code	LF	HFP	HF	LP	HP
Shape	Octagonal shape (large) 	Octagonal shape (small) with one point 	Octagonal shape (small) 	Stick shape (large) 	Stick shape (small) 

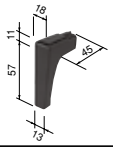
Code	MP	HR	LS*	LE	HE
Shape	Pistol shape (large) 	Pistol shape (small) 	Knob shape 	Egg shape (large) 	Egg shape (small) 

Code	HSP	USP
Shape	Beak shape (large) 	Beak shape (small) 

* The shaft for the LS handle is 13 mm shorter than the standard shaft.
Therefore, other types of handles cannot be replaced with the LS handle (knob shape).

■Handle code (For dual body type / pulling lock and pushing lock type)

Code	BD	BF	BP	MD	MF
Shape	Rose shape (large) 	Octagonal shape (large) 	Stick shape (large) 	Rose shape (small) 	Octagonal shape (small) 

Code	MQ	MR
Shape	Stick shape (small) 	Pistol shape (small) 

●CONTROL SWITCH

CAM-OPERATED SWITCH

B TYPE, BH TYPE

VOLTMETER • AMMETER SWITCH

HOW TO ORDER

B-V3-HDP-B JUMPER

Code	Switch
B	B type
BH	BH type

Type (page A27 to 30)

Handle code (page A6)

Color of handle / flange

Code	Jumper
(Blank)	No jumper
JUMPER	With jumper

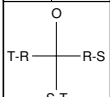
∗ The mark " ⌒ " shows a jumper.

STANDARD ARRANGEMENT DIAGRAM

Notice: Jumpers are not standard accessory.
If it's necessary, please instruct "with jumper".

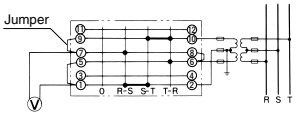
a) For voltmeter (standard handle: HDP)

Type V3



Nameplate No. 54-753 (E)

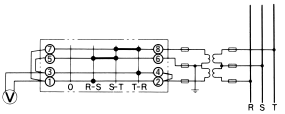
3-phase, 3-wire, 2-PT



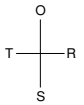
Type V2

Nameplate No. 54-490 (E)

3-phase, 3-wire, 2-PT

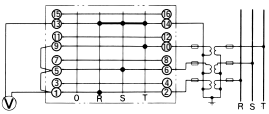


Type NV4



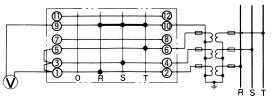
Nameplate No. 54-752

3-phase, 3-wire, 3-PT



Type NV3

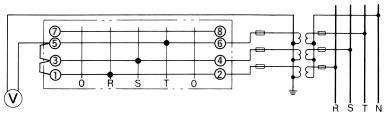
3-phase, 3-wire, 3-PT



Type NV2E

Nameplate No. 54-558

3-phase, 4-wire, 3-PT



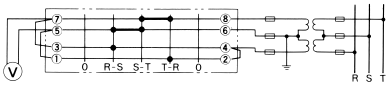
∗ If added "E" to the end of nameplate number, the nameplate in English shall be attached. For futher details, please see page A51 to A52 for nameplate.
Ex) 54-753 : Japanese 54-753E : English

a) For voltmeter (standard handle: HDP)

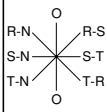
Type V2E

Nameplate No. 54-557 (E)

3-phase, 3-wire, 2-PT

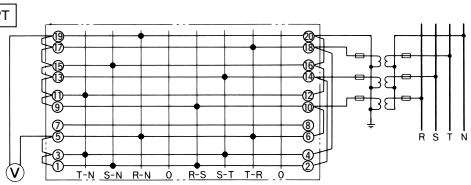


Type V5W

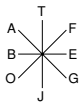


Nameplate No. 54-850 (E)

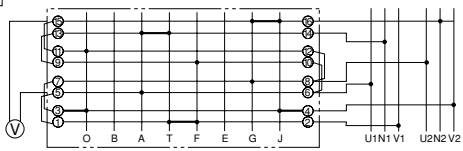
3-phase, 4-wire, 3-PT



Type V4O-2

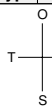


single 3-wire, 2-PT



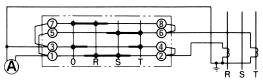
b) For ammeter (standard handle: HDP)

Type A2



Nameplate No. 54-755 (E)

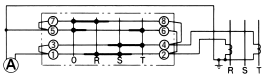
3-phase, 3-wire, 2-CT



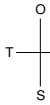
Type C2

Nameplate No. 54-495 (E)

3-phase, 3-wire, 2-CT

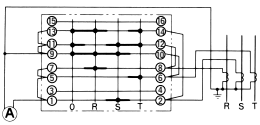


Type A4



Nameplate No. 54-755 (E)

3-phase, 3-wire, 3-CT



* For details of nameplates, see A51 to A52 and subsequent pages.