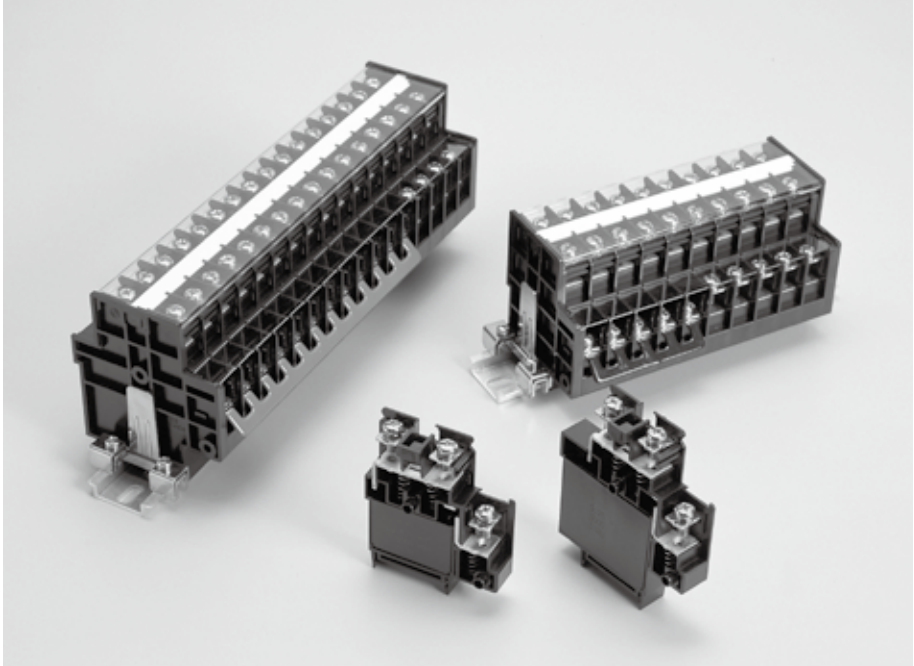




TCS TYPE, TCD TYPE



FEATURES

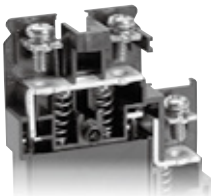
1 Approx. 40% size reduction from conventional TEC type



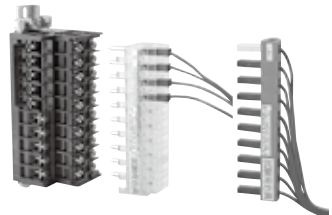
3 Incorporating a metallized polypropylene film capacitor that provides high withstand voltage and high reliability



2 Up-screw structure is used for terminal screw connections, preventing incomplete connection and reducing the number of work steps.



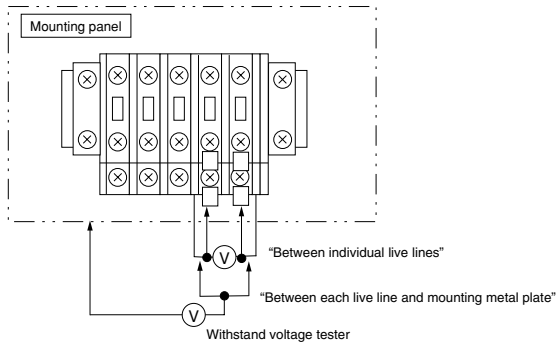
4 When a test connector (jig) is connected, withstand voltage test and sequence test can be easily conducted.



SPECIFICATIONS (RATINGS, PERFORMANCE)

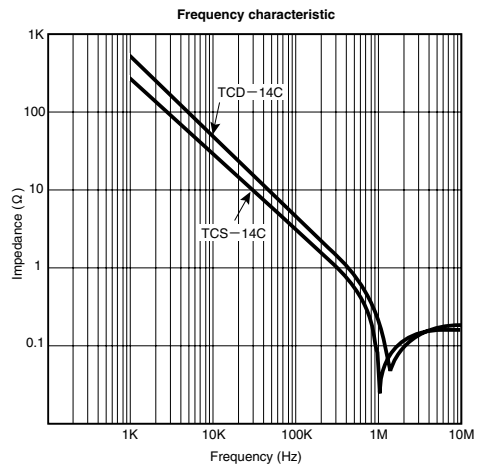
Type	TCS-14C	TCS-14	TCD-14C	TCD-14
Rated insulation voltage (Ui)	600V			
Rated current-carrying capacity (Ith)	60A			
Max. wire size	14mm ²			
Screw size	M5×11 (Up-screw type)			
Withstand voltage [*]	2,500V AC / 1min.			
Lightning impulse [*]	±7.2kV / 3 times for each pole (1.2 / 50 μs)			
Ambient operating temperature	-25 to 60°C			
Storing temperature	-40 to 75°C			
Altitude	2,000 m or less			

* Remark: "Commercial frequency withstand voltage" and "Impulse withstand voltage" are characteristics of the terminal block, not built-in capacitor's characteristics. Evaluations conducted when a voltage is applied to the points shown below (between individual live lines, and between each live line and mounting metal plate).



Built in capacitor specification

Type	TCS-14C	TCD-14C
Rated voltage	1,500VDC (AC conversion 550VAC)	3,000VDC (AC conversion 1,100VAC)
Capacitance	0.5μF ± 10%	0.25μF ± 10%
Dissipation factor	0.1% or less (1kHz)	0.1% or less (1kHz)
Withstand voltage	2,250V DC / 1 min.	4,500V DC / 1 min.
Dielectric material	Metallized polypropylene film (MPP)	

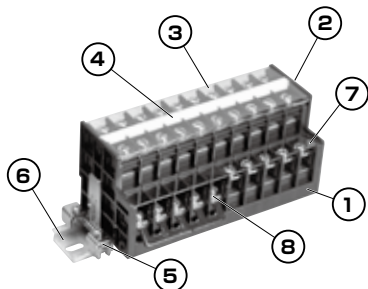




TCS TYPE, TCD TYPE

Product Composition

■ Necessary parts for assembling a terminal block



- ① Unit part ————— Refer to C150 to C151.
 - ② End plate
 - ③ Cover (Standard length: 1,000 mm)
 - ④ Marker strip (Standard length: 900 mm)
 - ⑤ End clamp
 - ⑥ Rail (Standard length: 1,000 mm)
 - ⑦ Ground terminal cover (Standard length: 1,000 mm)
 - ⑧ Jumper
- Refer to the list of applicable accessories for detail.

Remark: Please be noted each component has minimum order unit.

How to order of terminal blocks

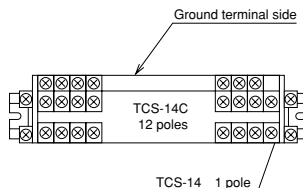
How to order assembly

1 One type assembly

TCS-14C × 12, 14 × 1 XF-230 ←

Basic type	No. of poles	Basic type	No. of poles	Rail	Assembly dimensions
TCS-14C	12	14	1	XF-230	

* Specify a model code from the left, with the earth terminal facing up.
For a complicated combination, use a reference material that specifies layout.



2 Some different type assembly

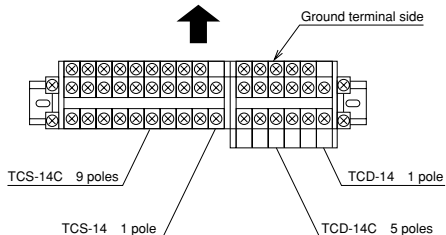
TCS-14C × 9, 14 × 1 + TCD-14C × 5, 14 × 1 XD - 15

Basic type	No. of poles	Basic type	No. of poles	Basic type	No. of poles	Basic type	No. of poles	Rail	Assembly dimensions
TCS-14C	9	14	1	TCD-14C	5	14	1	XD - 15	

●Rail

XF : U-cut rail
XD : Punched rail

* Regarding to the red terminal, please contact the staff in charge.

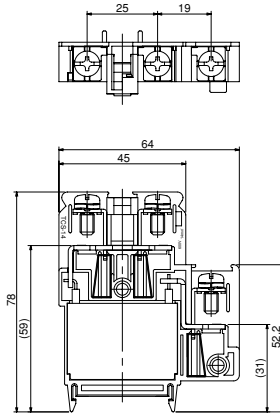
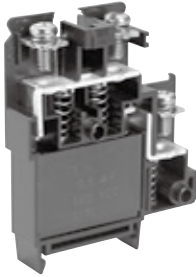


STANDARD PRODUCTS

TCS-14C (60A)

Unit with built-in capacitor

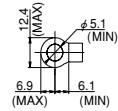
Applicable wire size: 5.5 to 14mm²



● Applicable accessories

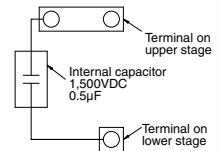
End plate	TCSE-14A,B
Standard marker strip	TUM-2
Standard rail	TXB
End clamp	TYL
Cover	TUC-6
Earth terminal cover	TCS-14-CV

● Applicable crimp terminal



* With insulating cover

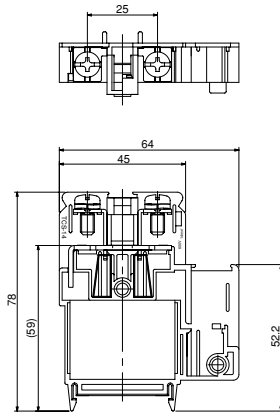
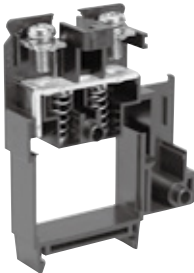
● TCS-14C internal connection diagram



TCS-14 (60A)

Unit without capacitor

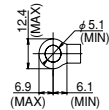
Applicable wire size: 5.5 to 14mm²



● Applicable accessories

End plate	TCSE-14A,B
Standard marker strip	TUM-2
Standard rail	TXB
End clamp	TYL
Cover	TUC-6
Earth terminal cover	TCS-14-CV

● Applicable crimp terminal



* With insulating cover

●UNIT TYPE

CAPACITOR TERMINAL BLOCK



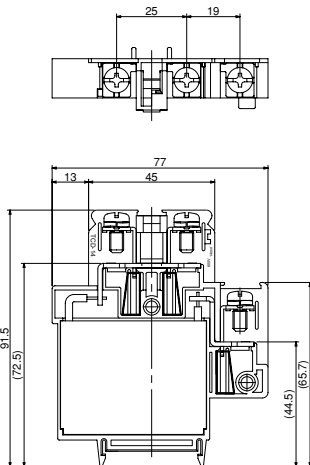
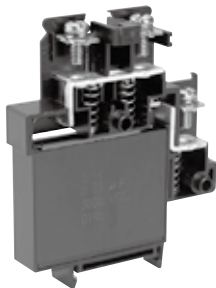
TCS TYPE, TCD TYPE

STANDARD PRODUCTS

TCD-14C (60A)

Unit with built-in capacitor

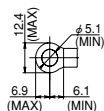
Applicable wire size: 5.5 to 14mm²



●Applicable accessories

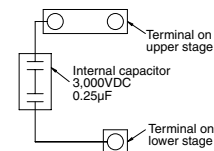
End plate	TCDE-14A,B
Standard marker strip	TUM-2
Standard rail	TXB
End clamp	TYL
Cover	TUC-6
Earth terminal cover	TCS-14-CV

●Applicable crimp terminal



* With insulating cover

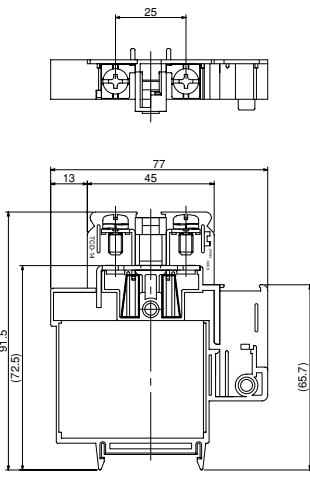
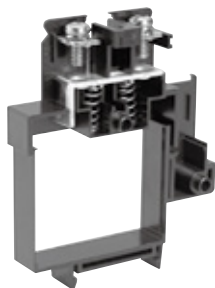
●TCD-14C internal connection diagram



TCD-14 (60A)

Unit without capacitor

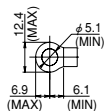
Applicable wire size: 5.5 to 14mm²



●Applicable accessories

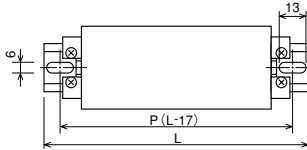
End plate	TCDE-14A,B
Standard marker strip	TUM-2
Standard rail	TXB
End clamp	TYL
Cover	TUC-6
Earth terminal cover	TCS-14-CV

●Applicable crimp terminal

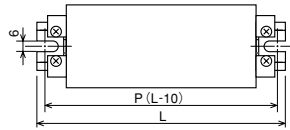


* With insulating cover

TABLE OF ASSEMBLED DIMENSIONS



Assembly on Punched rail
TXB-D type



Assembly on U-cut rail
TXB-F type

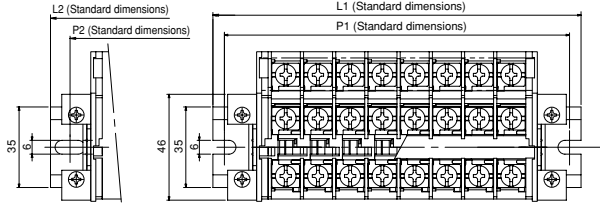
Type Pole	TCS-14C (14)			TCD-14C (14)			TCS-14C (14)			TCD-14C (14)			Type Pole
	P	L	Rail	P	L	Rail	P	L	Rail	P	L	Rail	
1	60	77	XD-4	60	77	XD-4	50	60	XF-60	50	60	XF-60	1
2	60	77	XD-4	60	77	XD-4	65	75	XF-75	65	75	XF-75	2
3	80	97	XD-5	80	97	XD-5	80	90	XF-90	80	90	XF-90	3
4	100	117	XD-6	100	117	XD-6	95	105	XF-105	95	105	XF-105	4
5	100	117	XD-6	100	117	XD-6	105	115	XF-115	105	115	XF-115	5
6	120	137	XD-7	120	137	XD-7	120	130	XF-130	120	130	XF-130	6
7	140	157	XD-8	140	157	XD-8	135	145	XF-145	135	145	XF-145	7
8	140	157	XD-8	140	157	XD-8	150	160	XF-160	150	160	XF-160	8
9	160	177	XD-9	160	177	XD-9	165	175	XF-175	165	175	XF-175	9
10	180	197	XD-10	180	197	XD-10	175	185	XF-185	175	185	XF-185	10
11	200	217	XD-11	200	217	XD-11	190	200	XF-200	190	200	XF-200	11
12	200	217	XD-11	200	217	XD-11	205	215	XF-215	205	215	XF-215	12
13	220	237	XD-12	220	237	XD-12	220	230	XF-230	220	230	XF-230	13
14	240	257	XD-13	240	257	XD-13	235	245	XF-245	235	245	XF-245	14
15	240	257	XD-13	240	257	XD-13	245	255	XF-255	245	255	XF-255	15
16	260	277	XD-14	260	277	XD-14	260	270	XF-270	260	270	XF-270	16
17	280	297	XD-15	280	297	XD-15	275	285	XF-285	275	285	XF-285	17
18	280	297	XD-15	280	297	XD-15	290	300	XF-300	290	300	XF-300	18
19	300	317	XD-16	300	317	XD-16	305	315	XF-315	305	315	XF-315	19
20	320	337	XD-17	320	337	XD-17	315	325	XF-325	315	325	XF-325	20
21	340	357	XD-18	340	357	XD-18	330	340	XF-340	330	340	XF-340	21
22	340	357	XD-18	340	357	XD-18	345	355	XF-355	345	355	XF-355	22
23	360	377	XD-19	360	377	XD-19	360	370	XF-370	360	370	XF-370	23
24	380	397	XD-20	380	397	XD-20	375	385	XF-385	375	385	XF-385	24
25	380	397	XD-20	380	397	XD-20	385	395	XF-395	385	395	XF-395	25
26	400	417	XD-21	400	417	XD-21	400	410	XF-410	400	410	XF-410	26
27	420	437	XD-22	420	437	XD-22	415	425	XF-425	415	425	XF-425	27
28	420	437	XD-22	420	437	XD-22	430	440	XF-440	430	440	XF-440	28
29	440	457	XD-23	440	457	XD-23	445	455	XF-455	445	455	XF-455	29
30	460	477	XD-24	460	477	XD-24	455	465	XF-465	455	465	XF-465	30
31	480	497	XD-25	480	497	XD-25	470	480	XF-480	470	480	XF-480	31
32	480	497	XD-25	480	497	XD-25	485	495	XF-495	485	495	XF-495	32
33	500	517	XD-26	500	517	XD-26	500	510	XF-510	500	510	XF-510	33
34	520	537	XD-27	520	537	XD-27	515	525	XF-525	515	525	XF-525	34
35	520	537	XD-27	520	537	XD-27	525	535	XF-535	525	535	XF-535	35
36	540	557	XD-28	540	557	XD-28	540	550	XF-550	540	550	XF-550	36
37	560	577	XD-29	560	577	XD-29	555	565	XF-565	555	565	XF-565	37
38	560	577	XD-29	560	577	XD-29	570	580	XF-580	570	580	XF-580	38
39	580	597	XD-30	580	597	XD-30	585	595	XF-595	585	595	XF-595	39



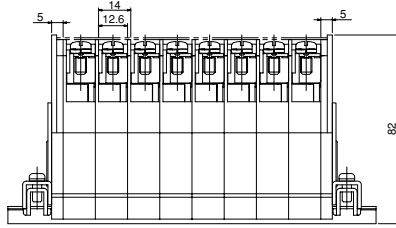
TCS TYPE, TCD TYPE

Assembly diagram

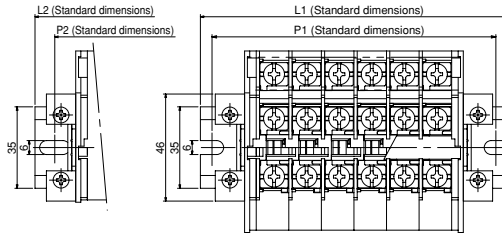
TCS-14C (14)



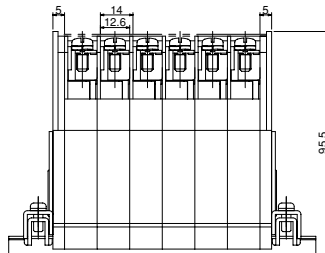
No. of poles		1	2	3	4
U-cut rail (XF rail)	P1	50	65	80	95
	L1	60	75	90	105
Punched rail (XD, KD rail)	P2	60	60	80	100
	L2	77	77	97	117
No. of poles		5	6	7	8
U-cut rail (XF rail)	P1	105	120	135	150
	L1	115	130	145	160
Punched rail (XD, KD rail)	P2	100	120	140	140
	L2	117	137	157	157



TCD-14C (14)



No. of poles		1	2	3	4
U-cut rail (XF rail)	P1	50	65	80	95
	L1	60	75	90	105
Punched rail (XD, KD rail)	P2	60	60	80	100
	L2	77	77	97	117
No. of poles		5	6	7	8
U-cut rail (XF rail)	P1	105	120	135	150
	L1	115	130	145	160
Punched rail (XD, KD rail)	P2	100	120	140	140
	L2	117	137	157	157





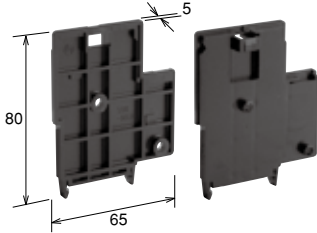
TCS TYPE, TCD TYPE

ACCESSORIES

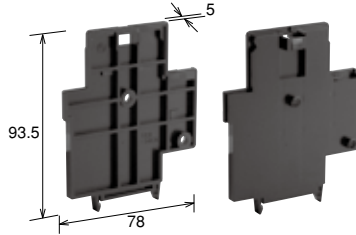
End plate

(Order unit: 50)

●TCSE-14-A, B



●TCDE-14-A, B

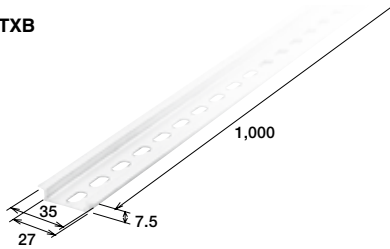


* Plates A and B should be used as a set.

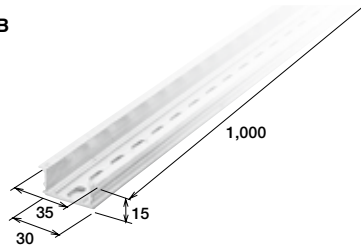
Aluminum rail

(Order unit: 50)

●TXB

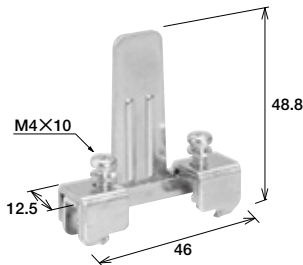


●TKB



End clamp

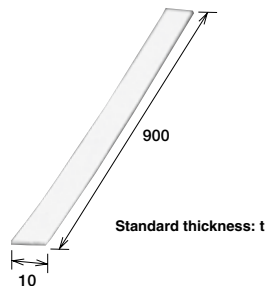
●TYL



Marker strip

(Order unit: 100)

- TUM-2 (1.0t)
- TUM-2-0.5t (0.5t)



Rail cap

Please refer to the page C15 for the rail cap.

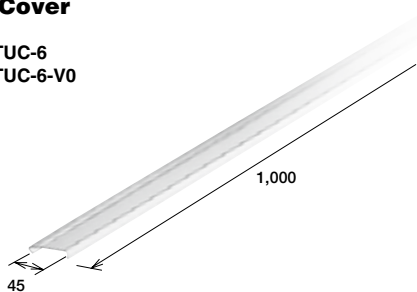


TCS TYPE, TCD TYPE

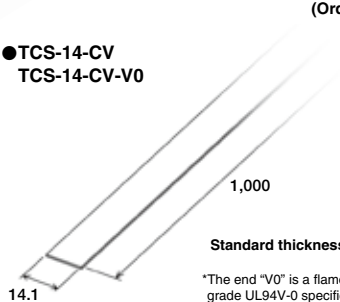
ACCESSORIES

Cover

- TUC-6
TUC-6-V0



- TCS-14-CV
TCS-14-CV-V0



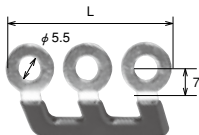
(Order unit: 20)

Standard thickness: $t = 0.5 \text{ mm}$

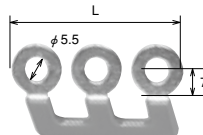
*The end "V0" is a flame retardant grade UL94V-0 specification product.

Ground bar (Jumper)

- SB14CB-(No. of poles) P (Black)



- SB14CG-(No. of poles) P (Green)



(Order unit: 10)

No. of poles	2	3	4	5	12
Type	SB14CB-2	SB14CB-3	SB14CB-4	SB14CB-5	SB14CB-12
L	26	40	54	68	166

No. of poles	2	3	4	5	12
Type	SB14CG-2	SB14CG-3	SB14CG-4	SB14CG-5	SB14CG-12
L	26	40	54	68	166

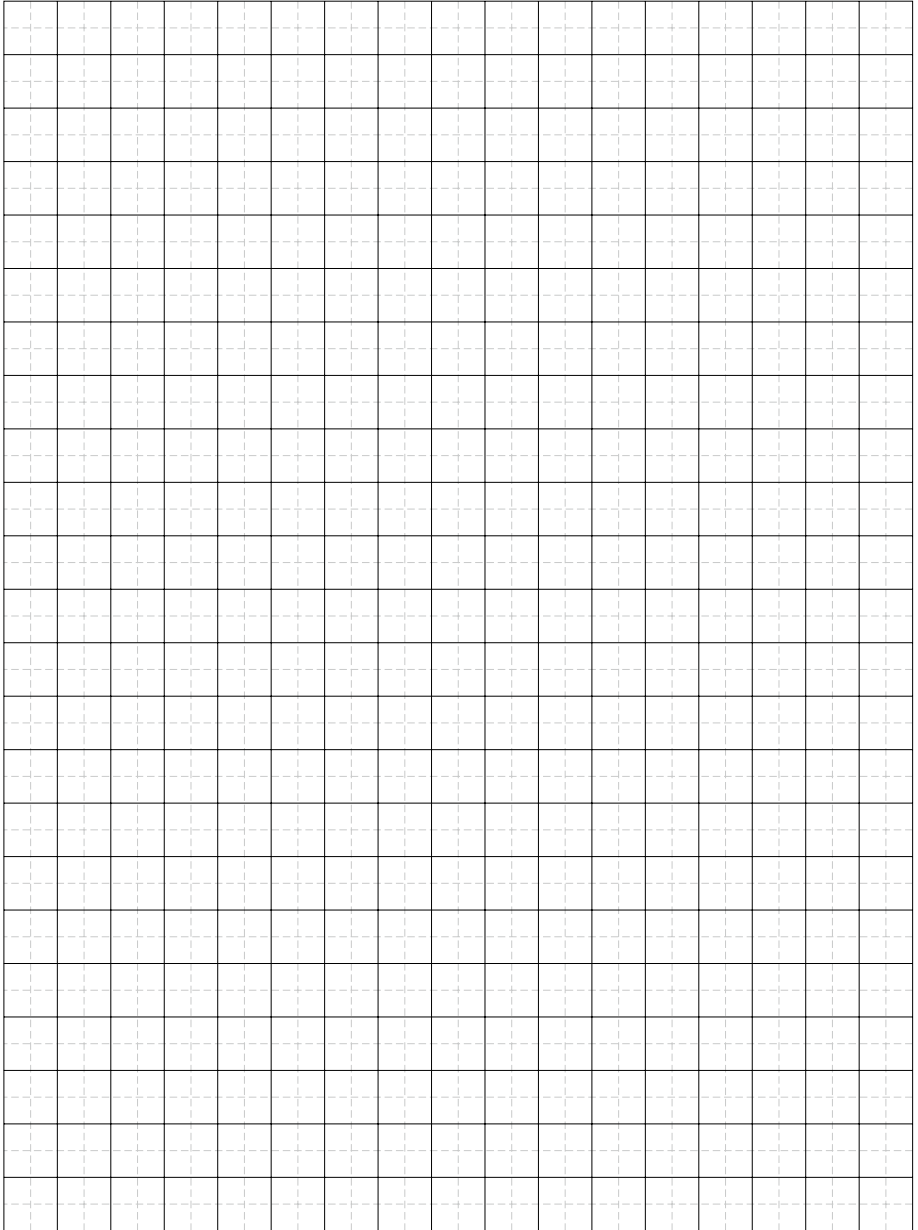
Testing connector

- TJ-14CH (No. of poles) PC (Connecting type)



*Receptacle connector for standard attachment AMP Inc. 172774-1

CONNECTING DEVICES



A SWITCH

B PILOT LAMP &
INDICATOR

C CONNECTING
DEVICES

D ELECTRONIC
DEVICES

E CONTROL
CENTER PARTS