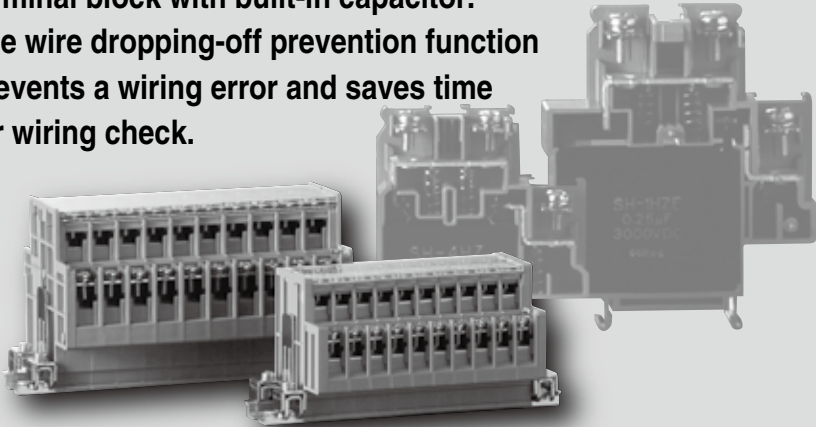




# TQS TYPE, TQD TYPE

The wire dropping-off prevention function is added to terminal block with built-in capacitor.

The wire dropping-off prevention function prevents a wiring error and saves time for wiring check.



## FEATURES

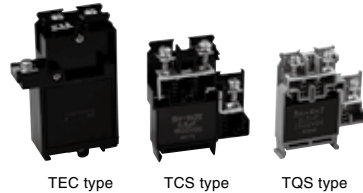
### *Use of wire dropping-off prevention function*

The TQ type adds a wire dropping-off prevention function to the conventional up-screw type terminal block, reducing check work after wiring.



### *Launch of TQS-5.5 as a model further miniaturized from conventional TCS type*

While conforming to the power standard of B-402, TQS-5.5 is smaller than the TCS which has been miniaturized from the TEC type. Volume ratio is 40%. Width reduction from 14 mm to 11 mm



TEC type

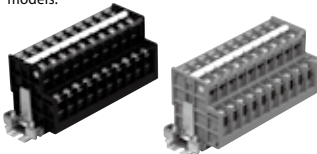
TCS type

TQS type

### *Differentiation by color*

The color of the terminal block is gray, which can be easily differentiated from conventional terminal blocks.

\* The resin material is high-performance engineering plastic (modified PPE resin), which is the same as that for conventional models.



### *Applicable to test tools*

As with the conventional model (TJ type), the TQ type can be easily used for withstand voltage test and sequence test.

With two types of test tools newly added to those for the conventional model, expansion of product lineup is expected.



## Use of high-performance film capacitor

Incorporating metallized polypropylene film capacitor that provides high withstand voltage and reliability, whose dielectric material has self-restoration effect



## Use of short-circuit bar has reduced the number of wiring steps.

A short-circuit bar is available as an accessory. Number of wiring steps can be reduced.



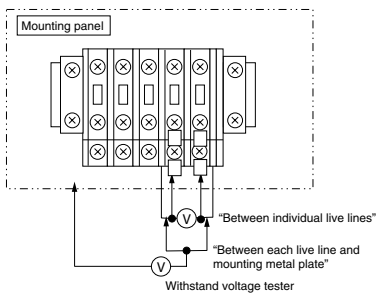
### SPECIFICATIONS (RATINGS, PERFORMANCE, STANDARD OPERATING CONDITION)

Item	TQS-5.5C TQS-5.5	TQS-8C TQS-8	TQD-8C TQD-8	TQS-14C TQS-14	TQD-14C TQD-14
Rated insulation voltage (Ui)	600V				
Rated impulse withstand voltage	6,000V				
Rated current-carrying capacity (Ith)	30A	40A		60A	
Rated connecting capacity	2 to 5.5mm <sup>2</sup>	3.5 to 8mm <sup>2</sup>		5.5 to 14mm <sup>2</sup> *1	
Screw size	M4×8.5	M5×11		M5×11	
Applicable crimp terminal	R2-4 / R3.5-4 / R5.5-4	R3.5-5 / R5.5-5 / R8-5		R5.5-5 / R8-5 / R14-5	
Power-frequency withstand voltage*2	2,500V AC / 1 min.				
Impulse withstand voltage*2	±7.2kV / 3 times for each pole (1.2 / 50 μs)				
Ambient operating temperature	-25 to 50°C				
Storing temperature	-40 to 75°C				
Altitude	2,000 m or less				

\*1: The dropping-off prevention ribs are effective for connection of a wire of 8 mm<sup>2</sup> or larger size.

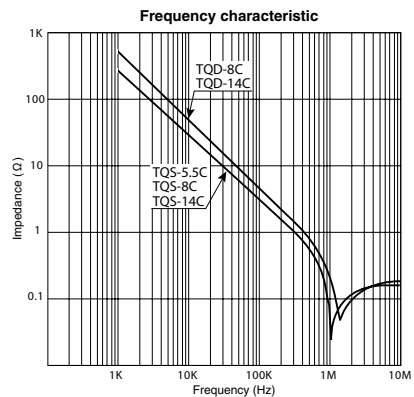
\*2: Note: "Commercial frequency withstand voltage" and "Impulse withstand voltage" are characteristics of the terminal block, not built-in capacitor's characteristics.

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	TQS-5.5C TQS-8C TQS-14C	TQD-8C TQD-14C
<b>Rated voltage</b>	1,500VDC (AC conversion 550VAC)	3,000VDC (AC conversion 1,100VAC)
<b>Capacitance</b>	0.5μF ± 10%	0.25μF ± 10%
<b>Dissipation factor</b>	0.1% or less (1kHz)	0.1% or less (1kHz)
<b>Withstand voltage</b>	2,250V DC / 1min.	4,500V DC / 1min.
<b>Dielectric material</b>	Metallized polypropylene film (MPP)	





# TQS TYPE, TQD TYPE

## HOW TO ORDER

**TQS - 5.5 C** × **10** **XF - 155**  
 ①      ②      ③      ④      Assembly dimensions

No.	Item	Code	Description	Remark	
①	Basic type	TQS-5.5	-		
		TQS-8	-		
		TQD-8	-		
		TQS-14	-		
		TQD-14	-		
②	Capacitor	C	with capacitor		
		(blank)	without capacitor		
③	No. of poles	1 to max.	1 to max.	For further details, please see page C163 for assembly dimensions.	
④	Rail	XD	TXB-D rail type	Punched rail	(Recommended maximum length: 600mm)
		XF	TXB-F rail type	U-cut rail	(Recommended maximum length: 600mm)
		KD	TKB- rail type	Reinforced punched rail	(Recommended maximum length: 1000mm)

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

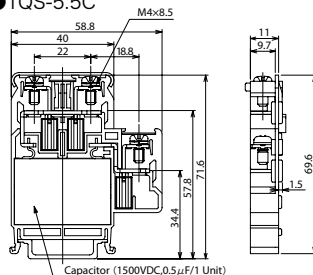
## STANDARD PRODUCTS

### TQS-5.5

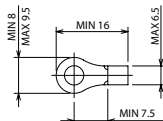
Applicable wire size: 2 to 5.5mm<sup>2</sup>



#### ●TQS-5.5C



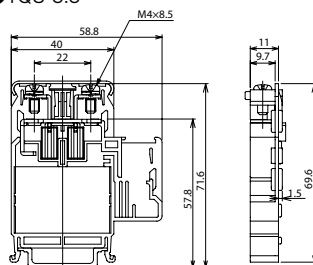
#### ●Applicable crimp terminal



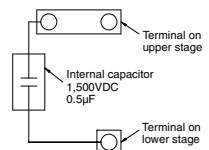
#### ●Applicable accessories

End plate	TQSE-5.5A/B
Standard marker strip	TUM-2 0.5T
Standard rail	TXB
End clamp	TYL
Cover (Line side)	TUC-3
Cover (Ground side)	TQS-5.5-CV

#### ●TQS-5.5

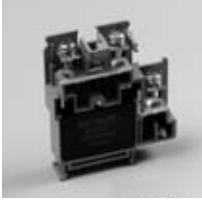


#### ●TQS-5.5C internal connection diagram

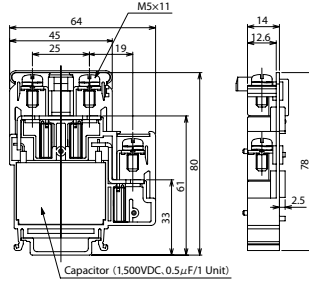


## TQS-8

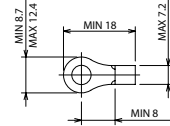
Applicable wire size: 3.5 to 8mm<sup>2</sup>



### ●TQS-8C



### ●Applicable crimp terminal

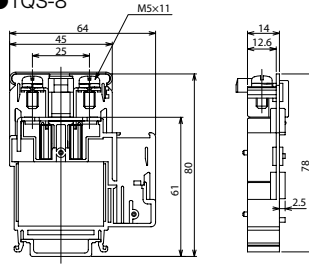
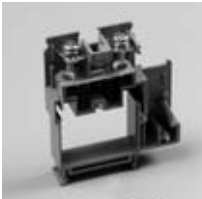


\* With insulating cover

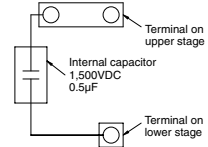
### ●Applicable accessories

End plate	TQSE-8A/B
Standard marker strip	TUM-2 0.5T
Standard rail	TXB
End clamp	TYL
Cover (Line side)	TUC-6
Cover (Ground side)	TCS-14-CV

### ●TQS-8



### ●TQS-8C internal connection diagram

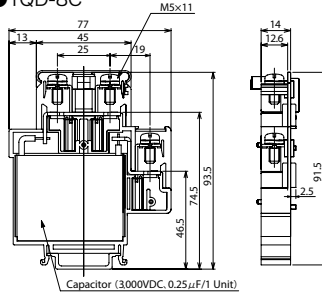


## TQD-8

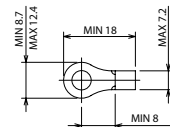
Applicable wire size: 3.5 to 8mm<sup>2</sup>



### ●TQD-8C



### ●Applicable crimp terminal

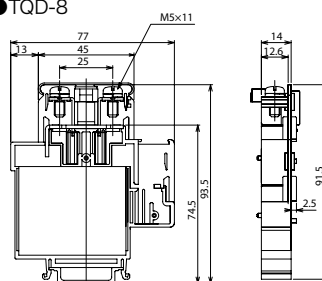


\* With insulating cover

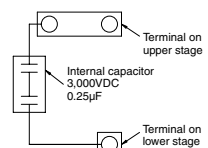
### ●Applicable accessories

End plate	TQDE-8A/B
Standard marker strip	TUM-2 0.5T
Standard rail	TXB
End clamp	TYL
Cover (Line side)	TUC-6
Cover (Ground side)	TCS-14-CV

### ●TQD-8



### ●TQD-8C internal connection diagram



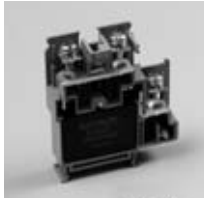


# TQS TYPE, TQD TYPE

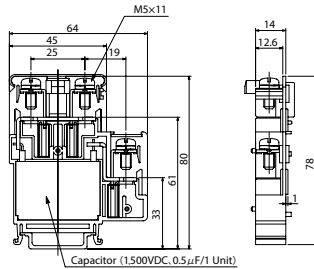
## STANDARD PRODUCTS

### TQS-14

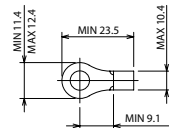
Applicable wire size: 5.5 to 14mm<sup>2</sup>



#### ●TQS-14C



#### ●Applicable crimp terminal

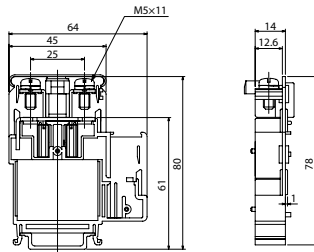


\* With insulating cover

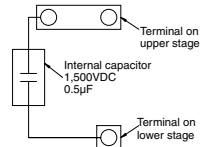
#### ●Applicable accessories

End plate	TQSE-14A/B
Standard marker strip	TUM-2 0.5T
Standard rail	TXB
End clamp	TYL
Cover (Line side)	TUC-6
Cover (Ground side)	TCS-14-CV

#### ●TQS-14



#### ●TQS-14C internal connection diagram

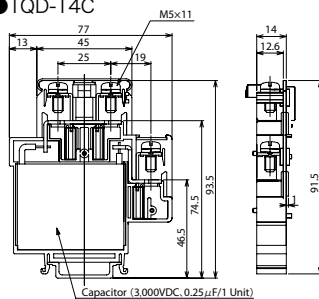


### TQD-14

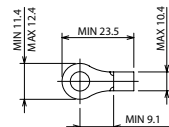
Applicable wire size: 5.5 to 14mm<sup>2</sup>



#### ●TQD-14C



#### ●Applicable crimp terminal

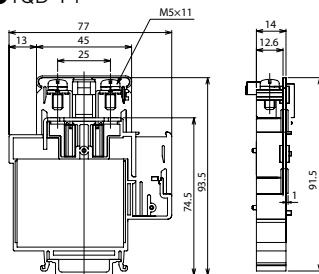


\* With insulating cover

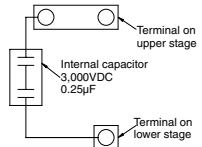
#### ●Applicable accessories

End plate	TQDE-14A/B
Standard marker strip	TUM-2 0.5T
Standard rail	TXB
End clamp	TYL
Cover (Line side)	TUC-6
Cover (Ground side)	TCS-14-CV

#### ●TQD-14



#### ●TQD-14C internal connection diagram

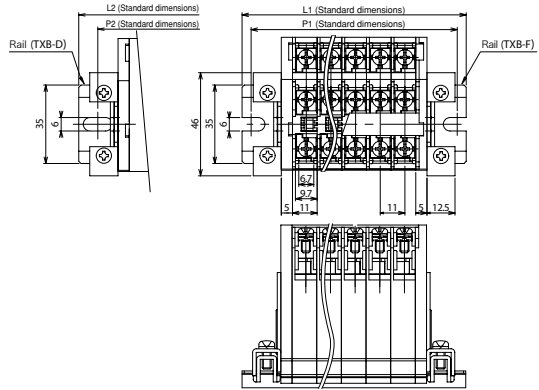


## Outlines (combination)

### TQS-5.5C / 5.5

- Assembly dimensions  
(Representative dimensions)

No. of poles		1	5	10
U-cut rail (XF rail)	P1	50	90	145
	L1	60	100	155
Punched rail (XD, KD rail)	P2	40	100	140
	L2	57	117	157

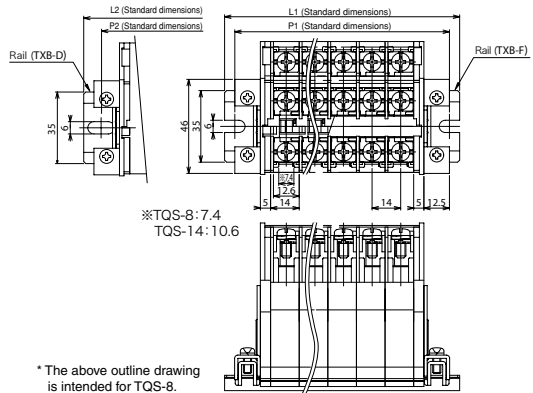


### TQS-8C / 8 TQS-14C / 14

(TQS-8C/8 and TQS-14C/14 have the same outer dimensions, except for the rib shape.)

- Assembly dimensions  
(Representative dimensions)

No. of poles		1	5	10
U-cut rail (XF rail)	P1	50	105	175
	L1	60	115	185
Punched rail (XD, KD rail)	P2	60	100	180
	L2	77	117	197

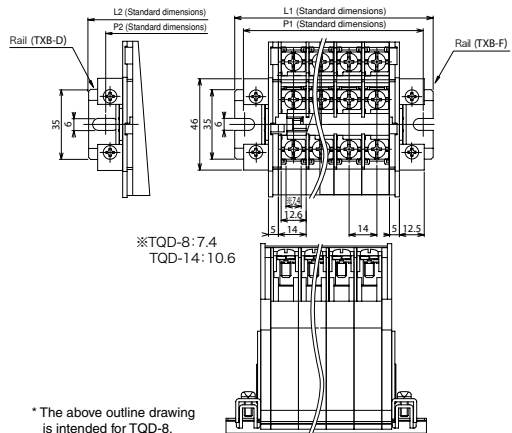


### TQD-8C / 8 TQD-14C / 14

(TQD-8C/8 and TQD-14C/14 have the same outer dimensions, except for the rib shape.)

- Assembly dimensions  
(Representative dimensions)

No. of poles		1	5	10
U-cut rail (XF rail)	P1	50	105	175
	L1	60	115	185
Punched rail (XD, KD rail)	P2	60	100	180
	L2	77	117	197

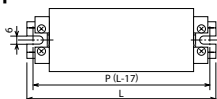




# TQS TYPE, TQD TYPE

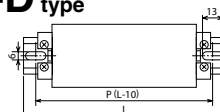
## TABLE OF ASSEMBLED DIMENSIONS

### TXB-F type



Type Pole	TQS-5.5C / TQS-5.5			TQS-8C / 8,TQS-14C / 14 TQD-8C / 8,TQD-14C / 14		
	P	L	Rail	P	L	Rail
1	50	60	XF-60	50	60	XF-60
2	60	70	XF-70	65	75	XF-75
3	70	80	XF-80	80	90	XF-90
4	80	90	XF-90	95	105	XF-105
5	90	100	XF-100	105	115	XF-115
6	105	115	XF-115	120	130	XF-130
7	115	125	XF-125	135	145	XF-145
8	125	135	XF-135	150	160	XF-160
9	135	145	XF-145	165	175	XF-175
10	145	155	XF-155	175	185	XF-185
11	160	170	XF-170	190	200	XF-200
12	170	180	XF-180	205	215	XF-215
13	180	190	XF-190	220	230	XF-230
14	190	200	XF-200	235	245	XF-245
15	200	210	XF-210	245	255	XF-255
16	215	225	XF-225	260	270	XF-270
17	225	235	XF-235	275	285	XF-285
18	235	245	XF-245	290	300	XF-300
19	245	255	XF-255	305	315	XF-315
20	255	265	XF-265	315	325	XF-325
21	270	280	XF-280	330	340	XF-340
22	280	290	XF-290	345	355	XF-355
23	290	300	XF-300	360	370	XF-370
24	300	310	XF-310	375	385	XF-385
25	310	320	XF-320	385	395	XF-395
26	325	335	XF-335	400	410	XF-410
27	335	345	XF-345	415	425	XF-425
28	345	355	XF-355	430	440	XF-440
29	355	365	XF-365	445	455	XF-455
30	365	375	XF-375	455	465	XF-465
31	380	390	XF-390	470	480	XF-480
32	390	400	XF-400	485	495	XF-495
33	400	410	XF-410	500	510	XF-510
34	410	420	XF-420	515	525	XF-525
35	420	430	XF-430	525	535	XF-535
36	435	445	XF-445	540	550	XF-550
37	445	455	XF-455	555	565	XF-565
38	455	465	XF-465	570	580	XF-580
39	465	475	XF-475	585	595	XF-595
40	475	485	XF-485			
41	490	500	XF-500			
42	500	510	XF-510			
43	510	520	XF-520			
44	520	530	XF-530			
45	530	540	XF-540			
46	545	555	XF-555			
47	555	565	XF-565			
48	565	575	XF-575			
49	575	585	XF-585			
50	585	595	XF-595			

### TXB-D TKB-D type



Type Pole	TQS-5.5C / TQS-5.5				TQS-8C / 8,TQS-14C / 14 TQD-8C / 8,TQD-14C / 14			
	P	L	Rail		P	L	Rail	
1	40	57	XD-3	KD-3	60	77	XD-4	KD-4
2	60	77	XD-4	KD-4	60	77	XD-4	KD-4
3	80	97	XD-5	KD-5	80	97	XD-5	KD-5
4	80	97	XD-5	KD-5	100	117	XD-6	KD-6
5	100	117	XD-6	KD-6	100	117	XD-6	KD-6
6	100	117	XD-6	KD-6	120	137	XD-7	KD-7
7	120	137	XD-7	KD-7	140	157	XD-8	KD-8
8	120	137	XD-7	KD-7	140	157	XD-8	KD-8
9	140	157	XD-8	KD-8	160	177	XD-9	KD-9
10	140	157	XD-8	KD-8	180	197	XD-10	KD-10
11	160	177	XD-9	KD-9	200	217	XD-11	KD-11
12	160	177	XD-9	KD-9	200	217	XD-11	KD-11
13	180	197	XD-10	KD-10	220	237	XD-12	KD-12
14	200	217	XD-11	KD-11	240	257	XD-13	KD-13
15	200	217	XD-11	KD-11	240	257	XD-13	KD-13
16	220	237	XD-12	KD-12	260	277	XD-14	KD-14
17	220	237	XD-12	KD-12	280	297	XD-15	KD-15
18	240	257	XD-13	KD-13	280	297	XD-15	KD-15
19	240	257	XD-13	KD-13	300	317	XD-16	KD-16
20	260	277	XD-14	KD-14	320	337	XD-17	KD-17
21	260	277	XD-14	KD-14	340	357	XD-18	KD-18
22	280	297	XD-15	KD-15	340	357	XD-18	KD-18
23	300	317	XD-16	KD-16	360	377	XD-19	KD-19
24	300	317	XD-16	KD-16	380	397	XD-20	KD-20
25	320	337	XD-17	KD-17	380	397	XD-20	KD-20
26	320	337	XD-17	KD-17	400	417	XD-21	KD-21
27	340	357	XD-18	KD-18	420	437	XD-22	KD-22
28	340	357	XD-18	KD-18	420	437	XD-22	KD-22
29	360	377	XD-19	KD-19	440	457	XD-23	KD-23
30	360	377	XD-19	KD-19	460	477	XD-24	KD-24
31	380	397	XD-20	KD-20	480	497	XD-25	KD-25
32	380	397	XD-20	KD-20	480	497	XD-25	KD-25
33	400	417	XD-21	KD-21	500	517	XD-26	KD-26
34	420	437	XD-22	KD-22	520	537	XD-27	KD-27
35	420	437	XD-22	KD-22	520	537	XD-27	KD-27
36	440	457	XD-23	KD-23	540	557	XD-28	KD-28
37	440	457	XD-23	KD-23	560	577	XD-29	KD-29
38	460	477	XD-24	KD-24	560	577	XD-29	KD-29
39	460	477	XD-24	KD-24	580	597	XD-30	KD-30
40	480	497	XD-25	KD-25				
41	480	497	XD-25	KD-25				
42	500	517	XD-26	KD-26				
43	520	537	XD-27	KD-27				
44	520	537	XD-27	KD-27				
45	540	557	XD-28	KD-28				
46	540	557	XD-28	KD-28				
47	560	577	XD-29	KD-29				
48	560	577	XD-29	KD-29				
49	580	597	XD-30	KD-30				
50	580	597	XD-30	KD-30				



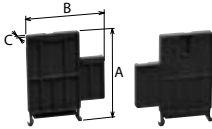
# TQS TYPE, TQD TYPE

## ACCESSORIES

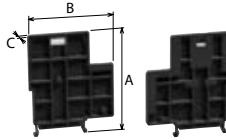
### End plate

(Order unit: 50)

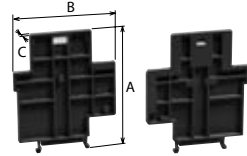
●TQSE-5.5A/B



●TQSE-8A/B  
TQSE-14A/B



●TQDE-8A/B  
TQDE-14A/B



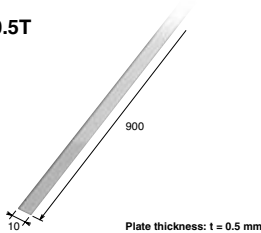
Basic type	TQSE-5.5A TQSE-5.5B	TQSE-8A TQSE-8B	TQDE-8A TQDE-8B	TQSE-14A TQSE-14B	TQDE-14A TQDE-14B
A	70.6	80	93.5	80	93.5
B	58.8	65	78	65	78
C	5	5	5	5	5

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

### Marker strip

(Order unit: 100)

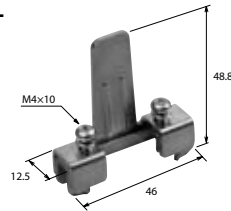
●TUM-2 0.5T



### End clamp

(Order unit: 100)

●TYL

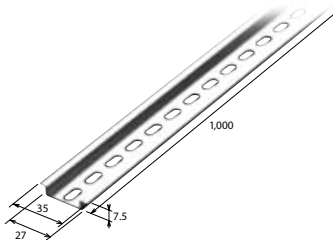


### Aluminium rail

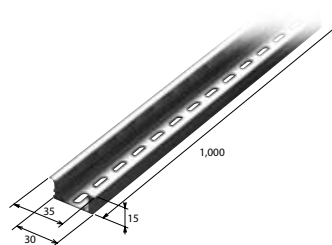
(Order unit: 50)

(Order unit: 20)

●TXB (DIN rail)



●TKB (Reinforced DIN rail)







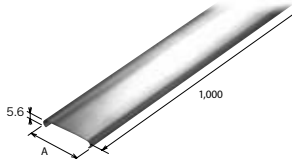
# TQS TYPE, TQD TYPE

## ACCESSORIES

### Cover (Line side)

(Order unit: 20)

●TUC-□



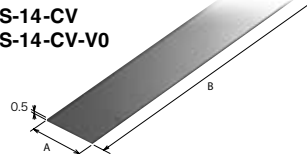
Basic type	TUC-3	TUC-6
	TUC-3-V0	TUC-6-V0
A	40	45

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

### Cover (Ground side)

(Order unit: 20)

●TQS-5.5-CV  
TQS-5.5-CV-V0  
TCS-14-CV  
TCS-14-CV-V0



Basic type	TQS-5.5-CV	TCS-14-CV
	TQS-5.5-CV-V0	TCS-14-CV-V0
A	13	14.1
B	910	1,000

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

### Ground bar (Jumper)

(Order unit: 10)

●SB11 Color - No. of poles

Color of insulation coat (Black)	SB 11CB-□
Color of insulation coat (Green)	SB 11CG-□
Dimensions	

No. of poles	2	3	4	5	12
L	20.5	31.5	42.5	53.5	130.5

●SB14 Color - No. of poles

Color of insulation coat (Black)	SB 14CB-□
Color of insulation coat (Green)	SB 14CG-□
Dimensions	

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

### Rail cap

Please refer to the page C15 for the rail cap.

## TEST TOOL ACCESSORIES

### TJ-5.5CH [No. of poles] PC (Connecting type)



(For TQS-5.5)

\*Receptacle contactor for standard attachment AMP Inc. 172774-1

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



(For TQS.D-8, TQS.D-14)

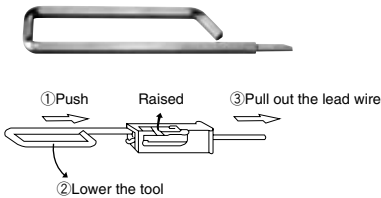
\*Receptacle contactor for standard attachment AMP Inc. 172774-1

### Remover

(Order unit: 1)

#### ●MIC-NQ

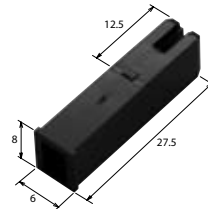
This tool is used to remove a receptacle from the plug of the XC.



### Plug

(Order unit: 100)

#### ●XC-P1-B

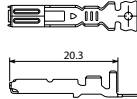


### Receptacle contactor

(Order unit: 100)

#### ●AMP Inc. (MIC) mark II

\* For the instruction, refer to AMP Inc. manual, IS-259J (91592-1) and IS-260J (755400-1).



Applicable wire size (mm <sup>2</sup> )	Insulator diameter (mm)	Material and coating	Model of receptacle		Model of * crimp tool
			Chain	Loose piece	
0.3 to 0.89	1.5 to 2.6	Brass / Tin plated	172775-1	172776-1	91592-1
		Brass / Partially gold plated	172775-2	172776-2	
		Phosphor bronze / Tin plated	172775-4	172776-4	
0.5 to 2.27	2.1 to 3.4	Brass / Tin plated	172773-1	* 172774-1	755400-1
		Brass / Partially gold plated	172773-2	172774-2	
		Phosphor bronze / Tin plated	172773-4	* 172774-4	

\* We handle the contactor.