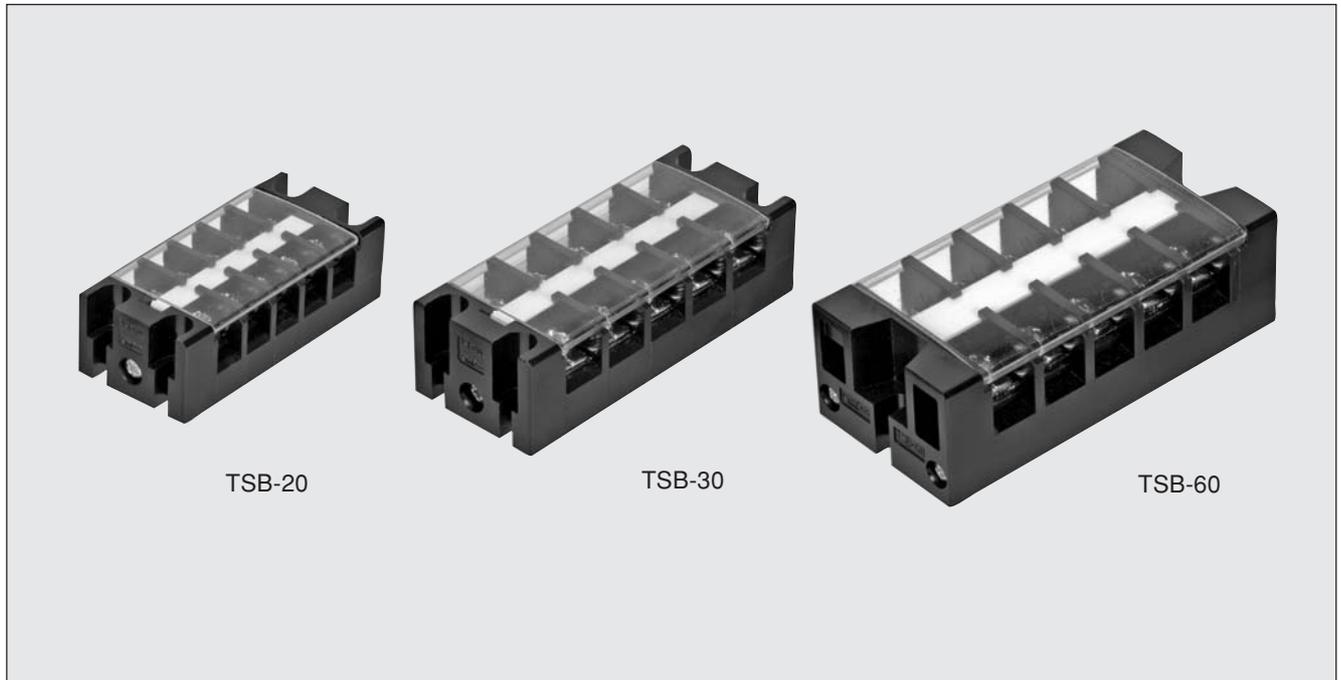


# Environmentally resistant terminal blocks

Cope to  $-50^{\circ}\text{C} \sim 85^{\circ}\text{C}$

## Cold resistant terminal block TSB Series



### □ Features

- Incombustibility grade of the terminal block, terminal, terminal cover, and name tag is UL94V-0.
- Since phenol resin is used as the insulation material, it corresponds to  $-50^{\circ}\text{C}$  usage conditions
- Mounting and dismounting of the terminal cover and name tag is easy. (However, except name tag of TSB-60)
- Square washer self-up screws are used as the terminal screws.

❖ Model Designation

**TSB - ※1 - □ P**

Model                  Number of polarities : 2~20

※1
Model
<b>20</b>
<b>30</b>
<b>60</b>

❖ Specifications

Item \ Model	TSB-20	TSB-30	TSB-60
Insulation Voltage	600V		
Current Capacity	20A	30A	60A
Matching Wire	3.5mm <sup>2</sup>	5.5mm <sup>2</sup>	14mm <sup>2</sup>
Pitch between Terminals	11mm	15mm	16mm
Terminal Screws	M4×8 (Square leaf) (Recommended torque: 1.4~1.8N·m)	M5×12 (Square leaf) (Recommended torque: 2.5~3.0N·m)	M5×12 (Square leaf) (Recommended torque: 2.5~3.0N·m)
Matching Crimp Contact	Max. Diameter	8.9mm	12.4mm
	Min. Inside Diameter (mm)	φ 4.2	φ 5.2
Legend Tag	7mm	8mm	12mm
Operating temperature range	-50~85°C		
Standard Conformity	JIS C 2811 Industrial Terminal Blocks		

❖ Specifications

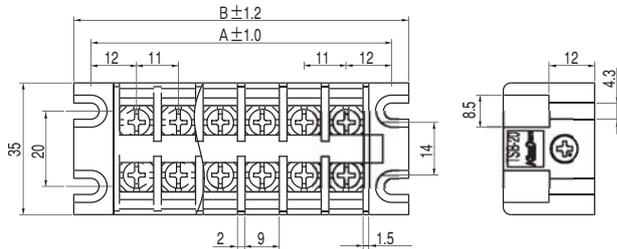
Insulation Resistance	500MΩ or more between live parts and ground measured by 500V DC megohmmeter
Withstand Voltage	2500V AC for 1 minute between live parts and ground
Temperature·Humidity	-50~85°C, 45~85%RH (No freezing or condensation)

❖ Materials

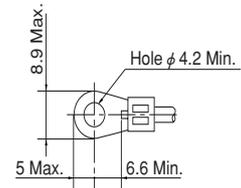
Materials of terminal	Phenol resin (black)	UL94V-0
Metal End	Phenol resin (black)	UL94V-0
Terminal Screws	Self-up Screws Carbon steel (Nickel plated)	
Terminal Metal	Brass (Nickel plated)	
Terminal Protection Cover	Polycarbonate resin (transparent)	UL94V-0
Legend Tag	Vinyl chloride resin (white)	UL94V-0

❖ Dimensions

▼TSB-20



• Applicable crimp terminal



●“A, B”dimensions (dimension:mm)

Number of polarities	2P	3P	4P	5P	6P	7P	8P	9P	10P	11P
A	35	46	57	68	79	90	101	112	123	134
B	44	55	66	77	88	99	110	121	132	143

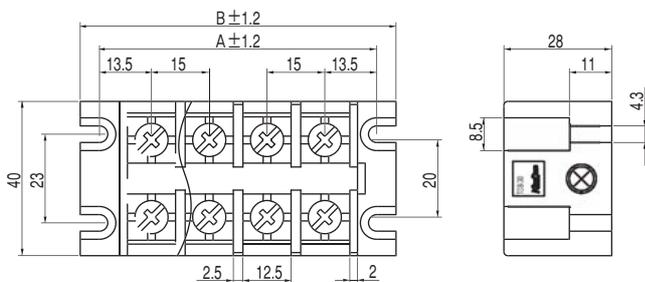
Number of polarities	12P	13P	14P	15P	16P	17P	18P	19P	20P
A	145	156	167	178	189	200	211	222	233
B	154	165	176	187	198	209	220	231	242

Weight (dimension : g)

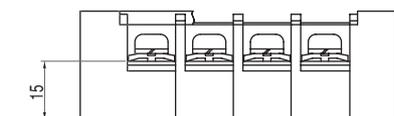
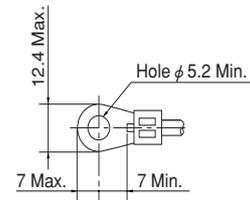
Number of polarities	2P	3P	4P	5P	6P	7P	8P	9P	10P	11P
Weight	47.5	62	76.5	91	105.5	120	134.5	149	163.5	178

Number of polarities	12P	13P	14P	15P	16P	17P	18P	19P	20P
Weight	192.5	207	221.5	236	250.5	265	279.5	294	308.5

▼TSB-30



• Applicable crimp terminal



●“A, B”dimensions (dimension:mm)

Number of polarities	2P	3P	4P	5P	6P	7P	8P	9P	10P	11P
A	42	57	72	87	102	117	132	147	162	177
B	52	67	82	97	112	127	142	157	172	187

Number of polarities	12P	13P	14P	15P	16P	17P	18P	19P	20P
A	192	207	222	237	252	267	282	297	312
B	202	217	232	247	262	277	292	307	322

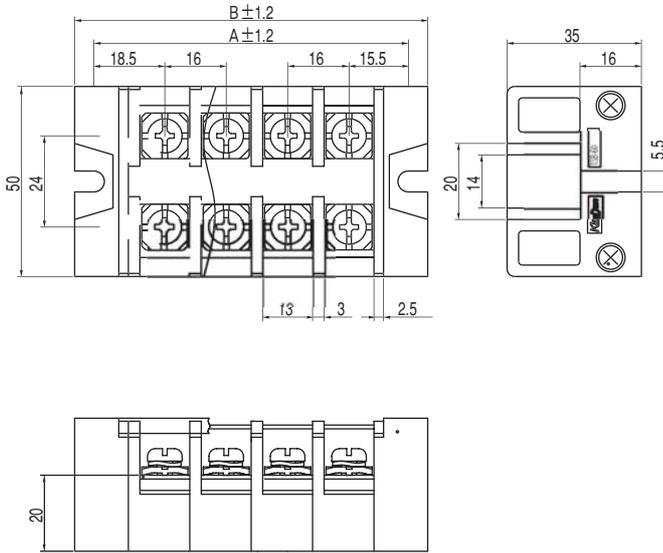
Weight (dimension : g)

Number of polarities	2P	3P	4P	5P	6P	7P	8P	9P	10P	11P
Weight	78.5	105	131.5	158	184.5	211	237.5	264	290.5	317

Number of polarities	12P	13P	14P	15P	16P	17P	18P	19P	20P
Weight	343.5	370	396.5	423	449.5	476	502.5	529	555.5

❖ Dimensions

▼TSB-60



• Applicable crimp terminal

●“A, B”dimensions (dimension:mm)

Number of polarities	2P	3P	4P	5P	6P	7P	8P	9P	10P	11P
A	50	66	82	98	114	130	146	162	178	194
B	60	76	92	108	124	140	156	172	188	204

Number of polarities	12P	13P	14P	15P	16P	17P	18P	19P	20P
A	210	226	242	258	274	290	306	322	338
B	220	236	252	268	284	300	316	332	348

Weight (dimension : g)

Number of polarities	2P	3P	4P	5P	6P	7P	8P	9P	10P	11P
Weight	133.4	175.7	218	260.3	302.6	344.9	387.2	429.5	471.8	514.1

Number of polarities	12P	13P	14P	15P	16P	17P	18P	19P	20P
Weight	556.4	598.7	641	683.3	725.6	767.9	810.2	852.5	894.8