

# SMALL PRESSURE CONTROLS

High Volume OEM Item

Type LTB, ETB, HTB & FTB



## GENERAL DESCRIPTION

- Factory set pressure switch designed for use in refrigeration units of quantity production such as room air conditioner (heat pump), packaged air conditioner (heat pump), water chiller etc.
- With SPDT contact mechanism.
- Models identified with electrical rating code L can be used for minimum 0.02A/125V.AC rating.
- Models with 0.78 to 1.96 MPa {8 to 20 kgf/cm<sup>2</sup>} range are also available for HTB and FTB.
- Models with 0.098 MPa {1 kgf/cm<sup>2</sup>} differential are also available for HTB (max. range limit: 1.27 MPa {13 kgf/cm<sup>2</sup>}).

CE mark applicable (available upon request)

UL recognized (available upon request)



Type HTB



Type FTB

## SPECIFICATIONS

- Fluid temperature: -20 to 120°C
- Ambient temperature: -20 to 70°C

## TYPE NUMBER SELECTION

Unit: MPa {kgf/cm<sup>2</sup>}

Catalog No.	Application	Range		Differential	Factory Setting		Max. Working Pressure	Pressure Connections	* Electrical Ratings	Wt. (kg)						
		Min.	Max.		On	Off										
LTB-A301	Low Pressure	0	0.392 {4}	0.059 to 0.147 {0.6 to 1.5}	0.294 {3}	0.196 {2}	1.5 {15}	①	H	0.08						
LTB-A302									M							
LTB-A303									L							
LTB-A304									②		H					
LTB-A305											M					
LTB-A306											L					
ETB-A301	Low Pressure	0.098 {1}	0.245 {2.5}	Automatic operation on pressure decrease and manual reset on pressure increase	Manual Reset	0.098 {1}	1.5 {15}	①	H	0.1						
ETB-A302									M							
ETB-A303									L							
ETB-A304									②		H					
ETB-A305											M					
ETB-A306											L					
HTB-A301	High Pressure	0.78 {8}	1.96 {20}	0.29 to 0.49 {3 to 5}	1.96 {20}	2.45 {25}	3.3 {33}	①	H	0.09						
HTB-A302									M							
HTB-A303									L							
HTB-A304		②	1.96 {20}	0.29 to 0.69 {3 to 7}	Manual Reset			2.45 {25}	3.3 {33}		①	H				
HTB-A305												M				
HTB-A306												L				
FTB-A301	High Pressure	0.78 {8}	2.94 {30}	Automatic operation on pressure increase and manual reset on pressure decrease	Manual Reset	2.45 {25}	3.3 {33}	①	H	0.1						
FTB-A302									M							
FTB-A303									L							
FTB-A304									②		2.94 {30}	Manual Reset	2.45 {25}	3.3 {33}	①	H
FTB-A305																M
FTB-A306																L

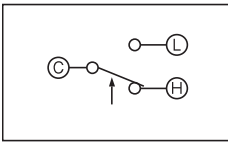
\* Refer to Electrical Ratings Table in the list below.

## ELECTRICAL RATINGS

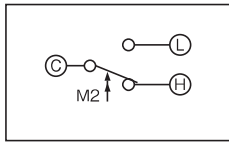
Rated Voltage (V)		Terminal	Power Factor (cos φ)	H Rating		M Rating		L Rating	
				125V.AC	250V.AC	125V.AC	250V.AC	125V.AC	250V.AC
Non-Inductive Current		C-L	1	1 to 10	1 to 10	1 to 3	0.5 to 1.5	0.02 to 2	0.02 to 1
Inductive Current	Full Load		0.75	1 to 6	1 to 6	1 to 2	0.5 to 1		
	Inrush Current		—	1 to 24	1 to 24	1 to 8	0.5 to 4		
Non-Inductive Current		C-H	1	1 to 16	1 to 16		1 to 6	0.5 to 4	0.02 to 2
Inductive Current	Full Load		0.75	1 to 16	1 to 16				
	Inrush Current		—	1 to 64	1 to 64	1 to 24			

# CONTACT FUNCTIONS

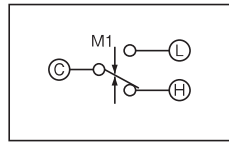
Type LTB & HTB



Type ETB (M2 : Manual Reset)



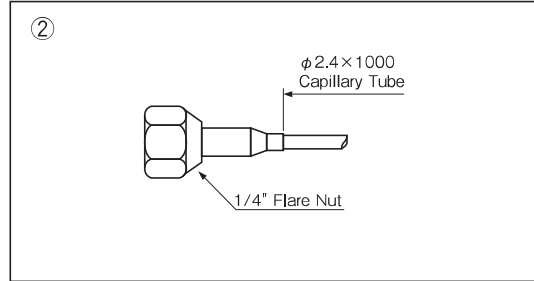
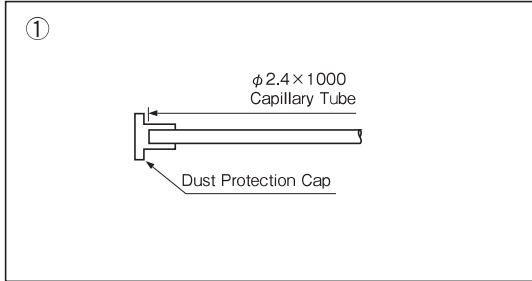
Type FTB (M1 : Manual Reset)



C	Common Terminal
L	Close on Pressure Increase
H	Close on Pressure Decrease

↑ : Operating direction on press. increase at High Press.Side  
 M1 ↓, M2 ↑ : Operating direction on manual reset

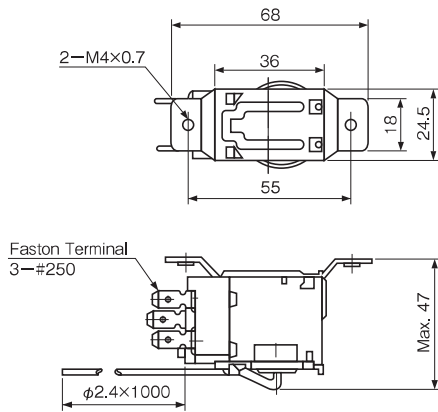
# PRESSURE CONNECTIONS



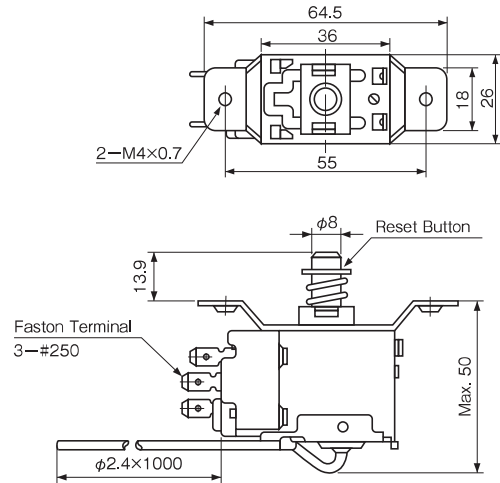
• 1/4" Solder Connection is also available upon request.

# DIMENSIONS

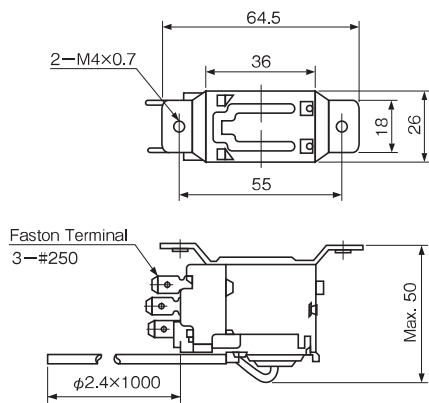
Type LTB



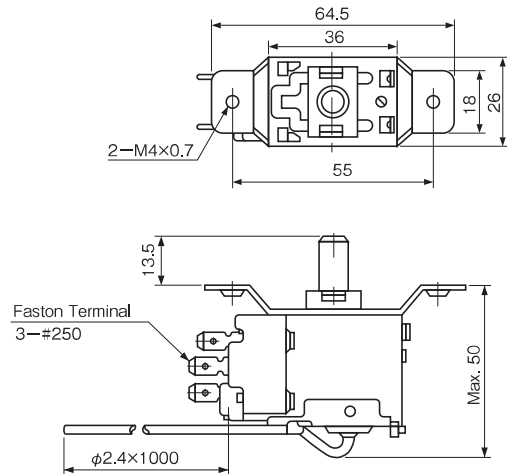
Type ETB



Type HTB



Type FTB



Unit: mm