



735



»» Features

- 20A/25A general purpose Relays.
- SPDT, DPDT, TPDT contact configurations
- DC & AC coils available.
- Optional for flange covers, tapped core w/ antirotation tab, indicator lamp, push-to-test button, PCB terminals
- Comply ewith RoHS Directive 2011/65/EU.



»» Type List

◆ Standard Type

Terminal style	Contact form	Enclosure style				
		Open type	Dust cover	Ears on cover	Antirotation-tab	Ears on top
Quick terminal	1A (SPNO)	735-1A	735-1A-C	735-1A-C1	735-1A-C2	735-1A-C3
	1B (SPNC)	735-1B	735-1B-C	735-1B-C1	735-1B-C2	735-1B-C3
	1C (SPDT)	735-1C	735-1C-C	735-1C-C1	735-1C-C2	735-1C-C3
	2A (DPNO)	735-2A	735-2A-C	735-2A-C1	735-2A-C2	735-2A-C3
	2B (DPNC)	735-2B	735-2B-C	735-2B-C1	735-2B-C2	735-2B-C3
	2C (DPDT)	735-2C	735-2C-C	735-2C-C1	735-2C-C2	735-2C-C3
	3A (TPNO)	735-3A	735-3A-C	735-3A-C1	735-3A-C2	735-3A-C3
	3B (TPNC)	735-3B	735-3B-C	735-3B-C1	735-3B-C2	735-3B-C3
	3C (TPDT)	735-3C	735-3C-C	735-3C-C1	735-3C-C2	735-3C-C3
PCB terminal	1A (SPNO)	-----	735-1A-C-T	-----	-----	-----
	1B (SPNC)	-----	735-1B-C-T	-----	-----	-----
	1C (SPDT)	-----	735-1C-C-T	-----	-----	-----
	2A (DPNO)	-----	735-2A-C-T	-----	-----	-----
	2B (DPNC)	-----	735-2B-C-T	-----	-----	-----
	2C (DPDT)	-----	735-2C-C-T	-----	-----	-----
	3A (TPNO)	-----	735-3A-C-T	-----	-----	-----
	3B (TPNC)	-----	735-3B-C-T	-----	-----	-----
	3C (TPDT)	-----	735-3C-C-T	-----	-----	-----

◆ High Power Type

Terminal style	Contact form	Insulation system	Enclosure style	
			Dust cover	Ears on cover
Quick terminal	1A (SPNO)	F	735H-1A-F-C	735H-1A-F-C1
	1B (SPNC)		735H-1B-F-C	735H-1B-F-C1
	1C (SPDT)		735H-1C-F-C	735H-1C-F-C1
	2A (DPNO)		735H-2A-F-C	735H-2A-F-C1
	2B (DPNC)		735H-2B-F-C	735H-2B-F-C1
	2C (DPDT)		735H-2C-F-C	735H-2C-F-C1

Ordering Information

$\frac{735}{1}$ - $\frac{H}{2}$ - $\frac{2C}{3}$ - $\frac{F}{4}$ - $\frac{C1}{5}$ - $\frac{M}{6}$ - $\frac{XXVXC}{7}$

- | | |
|---|--|
| <p>1. 735 -- Basic series designation</p> <p>2. Blank -- Standard type
H -- High power type</p> <p>3. 1A -- Single pole normally open
1B -- Single pole normally closed
1C -- Single pole double throw
2A -- Double pole normally open
2B -- Double pole normally closed
2C -- Double pole double throw
3A -- Three pole normally open
3B -- Three pole normally closed
3C -- Three pole double throw</p> | <p>4. Blank -- Standard type
F -- Class F</p> <p>5. Blank -- Open type
C -- With cover
C1 -- With mounting ears on cover
C2 -- With accessible mounting hole, with anti-rotation tab
C3 -- Mounting ears on top of cover</p> <p>6. Blank -- No special feature
M -- With manual operator
T -- Printed circuit board terminals
L -- Pilot lamp</p> <p>7. XXVXC -- Coil voltage (please refer to the coil rating data for the availability)"</p> |
|---|--|

Contact Rating

Type	735		735H
	1A, 1B, 1C, 2A, 2B, 2C	3A, 3B, 3C	
Resistive load	20A 240VAC	20A 120VAC	30A 240VAC
	15A 28VDC	15A 240VAC/28VDC	15A 28VDC

Coil Rating (DC)

Standard type

	Rated voltage (V)	Rated current 10% at 23°C (mA)	Coil resistance 10% at 23°C (Ω)	Max. continuous voltage at 50°C	Pick up voltage (Max) at 23°C	Drop out voltage (Min) at 23°C	Power consumption at rated voltage	
	SP	6	188	32	130% of rated voltage	80 % of rated voltage	10 % of rated voltage	approx. 1.2W
12		100	120					
24		51	472					
DP		48	27	1800				
		110	11	10000				
		125	12.5	10000				
TP	6	250	24	approx. 1.5W				
	12	125	96					
	24	63	384					
	48	31	1536					
	110	11.5	9600					
	125	13	9600					



735

◆ High Power Type

Rated voltage (V)	Rated current ±10% at 23°C (mA)	Coil resistance ±10% at 23°C (Ω)	Max continuous voltage at 55°C	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage
6	188	32	100% of rated voltage	80% of rated voltage	10% of rated voltage	approx. 1.2W
12	100	120				
24	51	472				
48	27	1800				
110	11	10000				
125	12.5	10000				

»» Coil Rating (AC)

◆ Standard Type

Rated voltage (V)	Coil resistance ±10% at 23°C (Ω)	Max.continuous voltage at 50°C	Pick up voltage (Max) at 23°C	Drop out voltage (Min) at 23°C	Power consumption at rated voltage	
SP DP	6	4.2	110% of rated voltage	85 % of rated voltage	30 % of rated voltage	approx.3.0 VA
	12	18				
	24	72				
	110	1580				
	120	1700				
	220	5850				
TP	240	7200	110% of rated voltage	85 % of rated voltage	30 % of rated voltage	approx.3.4VA
	6	3.9				
	12	14.5				
	24	64				
	110	1450				
	120	1540				
220	5850					
240	6750					

◆ High Power Type

Rated voltage (V)	Coil resistance ±10% at 23°C (Ω)	Max continuous voltage at 55°C	Pick up voltage(Max) at 23°C	Drop out voltage(Min) at 23°C	Power consumption at rated voltage
6	4.2	100 %of rated voltage	85 %of rated voltage	30 %of rated voltage	approx. 3.4VA
12	18				
24	72				
110	1580				
120	1700				
220	5850				
240	7200				

»» Specification

Contact material	AgSnO alloy	
Contact resistance ⁽¹⁾	50mΩ Max. (for 735), 100mΩ Max. (for 735H)	
Operate time ⁽¹⁾	25ms Max.	
Release time ⁽¹⁾	20ms Max.	
Insulation resistance ⁽¹⁾	1000MΩ Min. (DC 500V)	
Dielectric strength ⁽¹⁾	Between open contact	: AC 1000V, 50/60Hz 1 min (for 735) : AC 1500V, 50/60Hz 1 min (for 735H)
	Between contact and coil	: AC 1600V, 50/60Hz 1 min (for 735) : AC 3000V, 50/60Hz 1 min (for 735H)
	Between contact circuits	: AC 1600V, 50/60Hz 1 min (for 735) : AC 3000V, 50/60Hz 1 min (for 735)
Vibration resistance	Operating extremes	10 ~ 55Hz, amplitude 2.0mm
	Damage limits	10 ~ 55Hz, amplitude 2.0mm
Shock resistance	Operating extremes	10G
	Damage limits	100G
Life expectancy	Mechanical	10,000,000 operations (frequency 18,000 ops./hr)
	Electrical	100,000 operations (frequency 1,200 ops./hr) (for 735) NO: 30,000 operations NC:10,000 operations (frequency 360 ops./hr) (for 735H)
Operating ambient temperature		-30~+50°C (no freezing) (for 735) -30~+55°C (no freezing) (for 735H)
Weight	Approx. 80g	

Note : (1) initial value

»» Safety Approval

Certified	735			735H
	UL	CSA	FIMKO	UL / CUL
File No.	E88991	1664125	24560	E88991

»» Safety Approval Rating (FIMKO)

735 1A, 1B, 1C	735 2A, 2B, 2C	735 3A, 3B, 3C
25A 250VAC	25A 250VAC	20A 250VAC

»» Safety Approval Rating (UL - CSA)

UL			CSA		
735 1A, 1B, 1C	735 2A, 2B, 2C	735 3A, 3B, 3C	735 1A, 1B, 1C	735 2A, 2B, 2C	735 3A, 3B, 3C
25A 28VDC 25A 277VAC 10A 600VAC 1.5HP 240VAC 1HP 120VAC	20A 28VDC 25A 277VAC 10A 600VAC 1.5HP 240VAC 1HP 120VAC	15A 28VDC 20A 277VAC 3/4HP 120VAC 1HP 240VAC	30A 277VAC 10A 600VAC 25A 28VDC 1.5HP 240VAC 1HP 120VAC	25A 277VAC 10A 600VAC 20A 28VDC 1.5HP 240VAC 1HP 120VAC	20A 277VAC 15A 28VDC 3/4HP 120VAC 1HP 240VAC

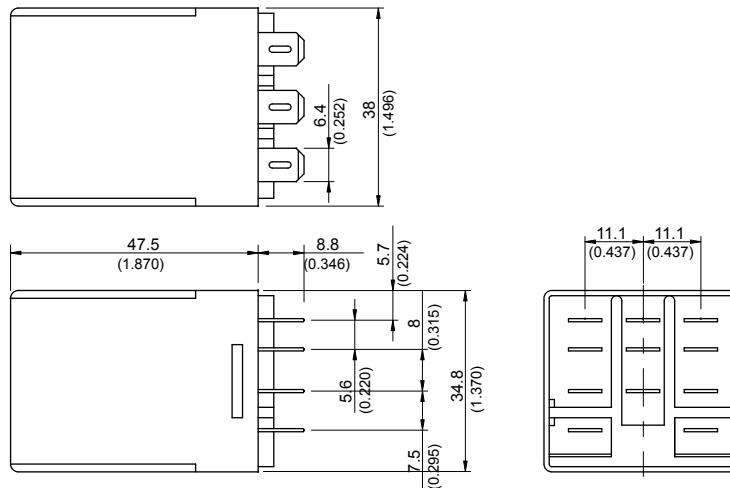


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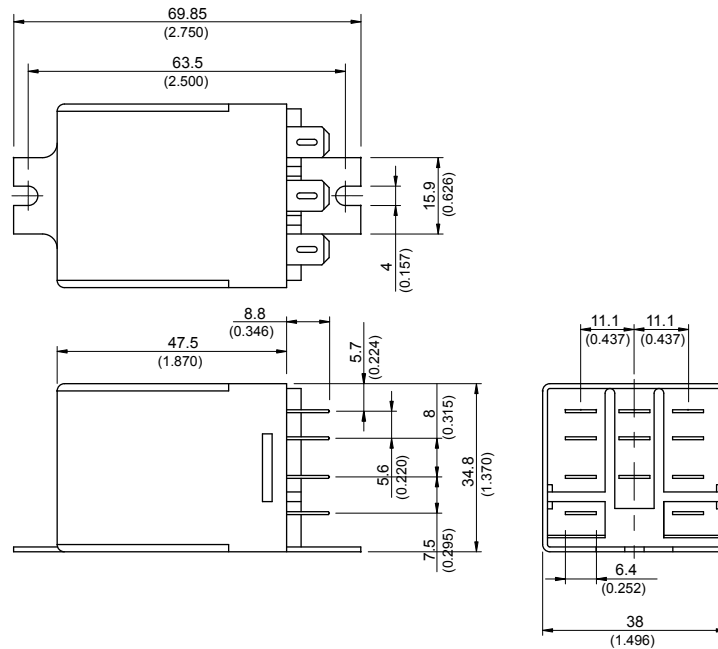
UL / CUL	
735H 1A, 1B, 1C	735H 2A, 2B, 2C
30A 277VAC	30A 277VAC
25A 28VDC	20A 28VDC
10A 600VAC	10A 600VAC
1.5HP 240VAC	1.5HP 240VAC
1HP 120VAC	1HP 120VAC

»» Outline Dimensions

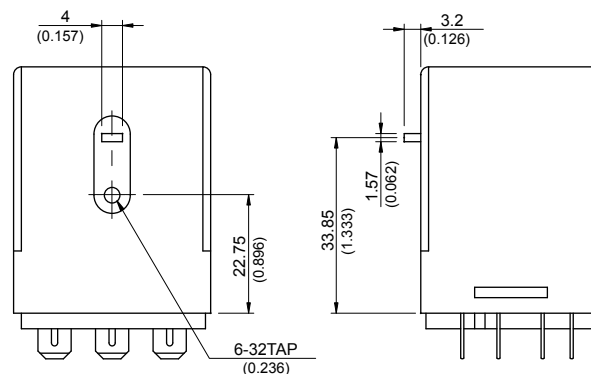
◆ 735 C



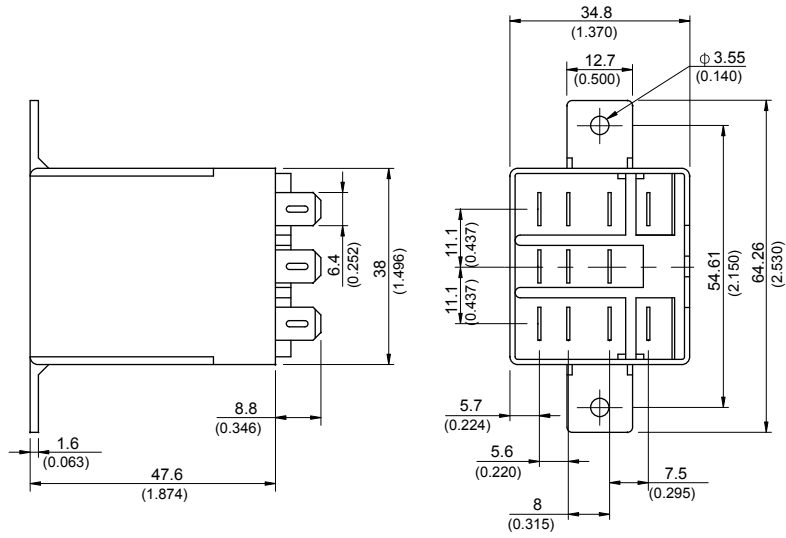
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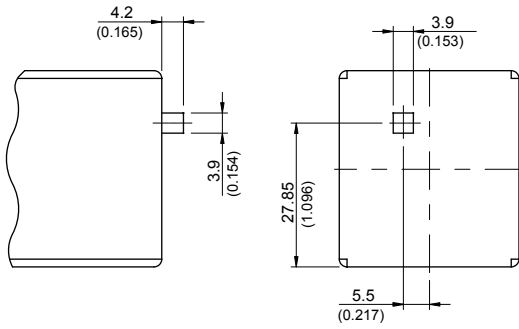
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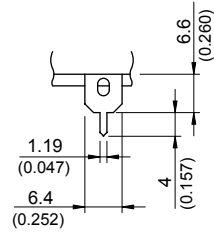
◆ 735 C3



◆ 735 M



◆ 735 T

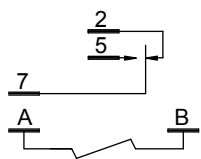




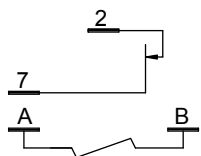
735

»» Wiring Diagram BOTTOM VIEW

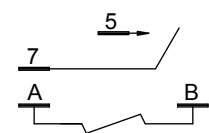
1C



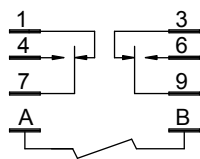
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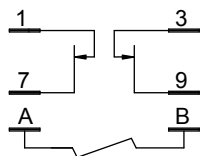
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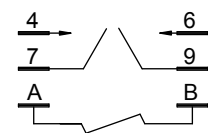
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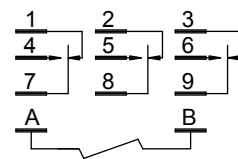
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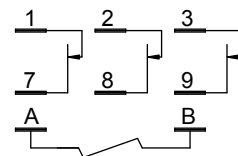
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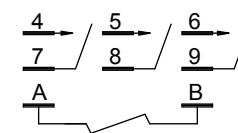
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3B

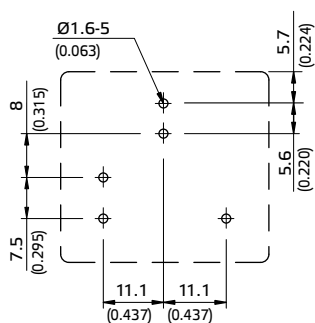


3A

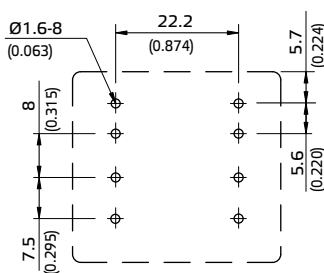


»» PC Board Layout BOTTOM VIEW

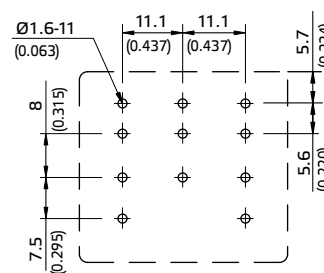
1P



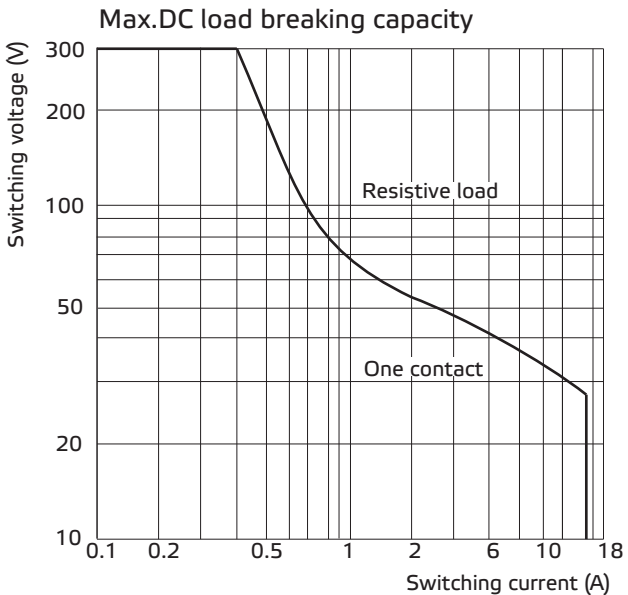
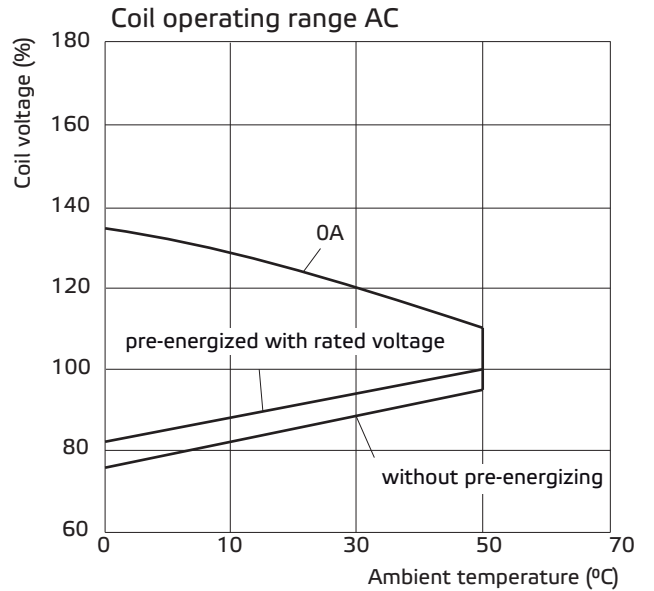
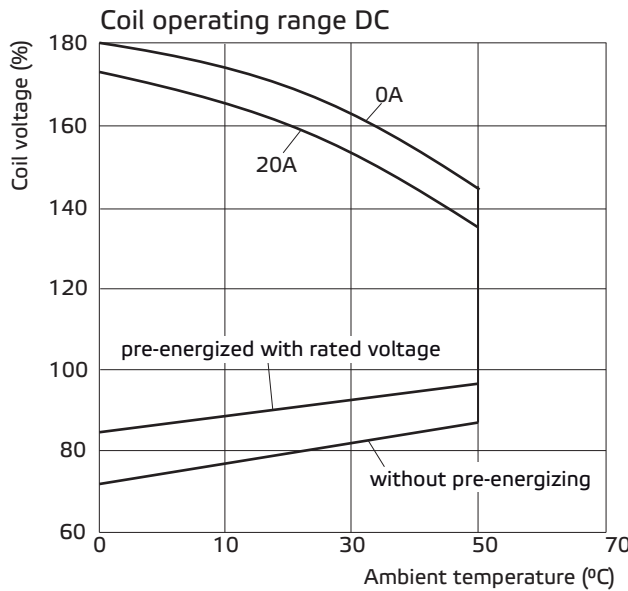
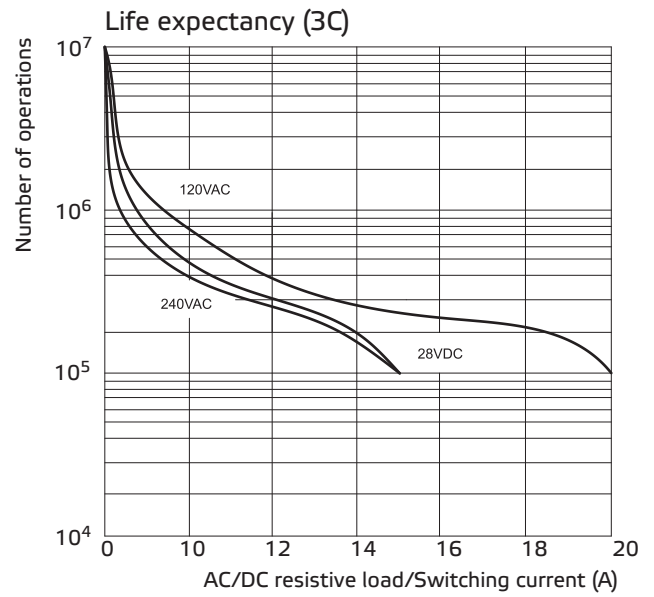
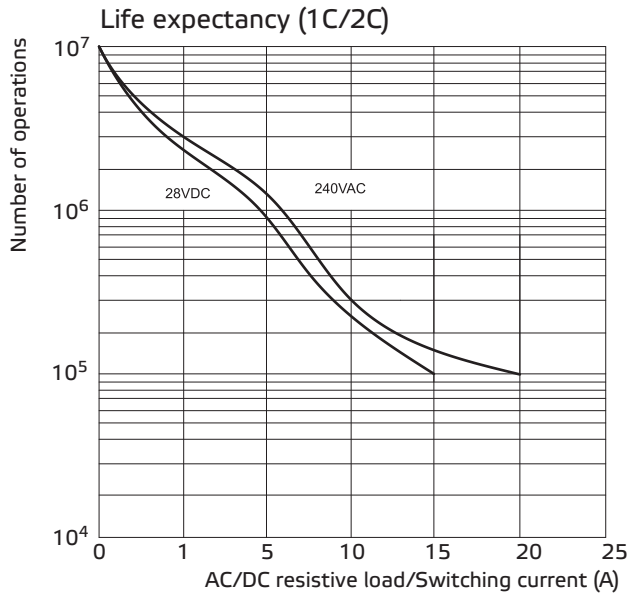
2P



3P



»» Engineering Data



Disclaimer

All technical performance data apply to the relay as such, specific conditions of the individual application are not considered. Please always check the suitability of the relay for your intended purpose. We do not assume any responsibility or liability for not complying herewith. We recommend to complete our questionnaire and to request our technical service. Any responsibility for the application of the product remains with the customer only. All specifications are subject to change without notification. All rights of Song Chuan are reserved.