

# Thermostatic Expansion Valve

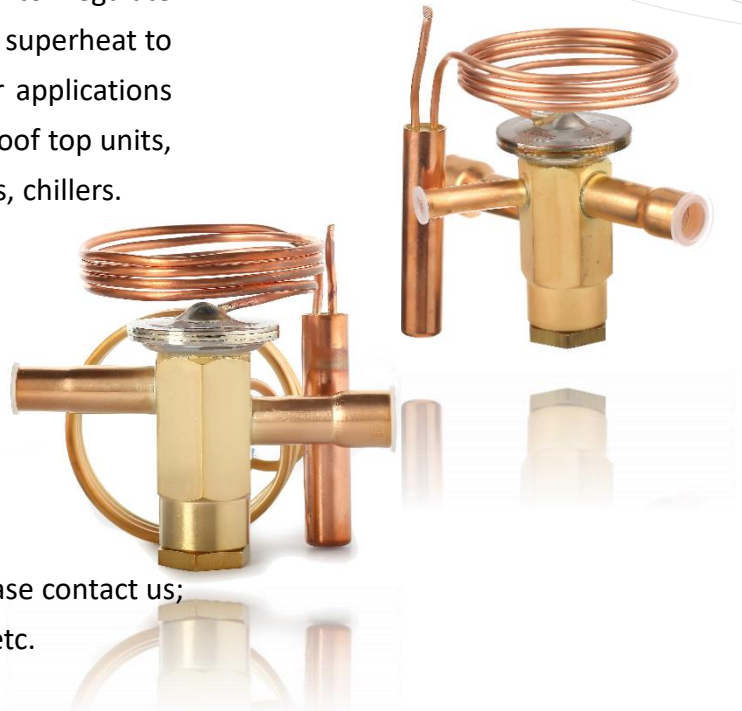
## TCCE Series

### Application

TCCE type Thermostatic expansion valve is used to regulate refrigerant flow into the evaporator by measuring the superheat to control the refrigerant supply, which is especially for applications in residential air conditioning systems, split systems, roof top units, heat pumps, light commercial air conditioning systems, chillers.

### Features

- Compact size - hermetic design;
- Fixed and adjustable superheat;
- Straight flow channel structure;
- Versions with and without check valve;
- Product with BP function or special installation, please contact us;
- Connection possibilities: Solder, Chatleff/Aeroquip etc.



### Approvals

UL, CE.

### Technical Data

Applicable Refrigerants: R407C, R410A, R134a, R404A, R507, R290, and R32

Max. Bulb Temperature: 100°C

Max. Valve Body Temperature: 110°C

Max. Operating Pressure: 4.6 MPa

Max. Test Pressure: 5.1 MPa

Options for Connections: ODF (3/8, 1/2, 5/8)

Equalization: 1/4 in. (ODF)

Capillary Tube: 800 mm

## Identification



## Refrigerant

**N:** R134a      **Z:** R407C  
**S:** R404A/R507    **P:** R290  
**L:** R410A    **D:** R32

## Example

**TCCEL** = Type (L = R410A)  
**2TR** = Rated Capacity in Tons  
**7kW** = Rated Capacity in kW  
**R410A** = Refrigerant  
**-25/+20°C** = Evaporating Temperature Range  
**440023130100** = Code Number  
**PS 46bar/MWP 667psig** = Max. Working Pressure  
**BB2800001** = Date Marking

## MOP Options

Refrigerant	Range N -40°C ~ +10°C	Range K -25°C ~ +20°C MOP 25°C
R404A/R507	(Without MOP)	11.4 bar
R407C	(Without MOP)	9.2 bar
R134a	(Without MOP)	5.6 bar
R410A	(Without MOP)	15.6 bar

Code numbers listed above refer to standard series. For other requirements, please contact DunAn

## Nominal Capacity

Model	Orifice No.	R407C		R410A		R134a		R404A/R507		R290	
		kW	TR	kW	TR	kW	TR	kW	TR	kW	TR
TCCE	1	5.3	1.5	7.0	2.0	4.6	1.3	4.2	1.2	6.3	1.8
	2	7	2.0	8.8	2.5	5.6	1.6	5.6	1.6	7.7	2.2
	3	8	2.3	10.5	3.0	7.0	2.0	6.7	1.9	9.1	2.6
	4	9.5	2.7	12.3	3.5	8.1	2.3	7.7	2.2	10.9	3.1
	5	11	3.1	14.0	4.0	9.1	2.6	8.8	2.5	12.3	3.5
	6	13.3	3.8	17.5	5.0	11.5	3.3	10.9	3.1	15.4	4.4
	7	16.1	4.6	21.0	6.0	13.7	3.9	13.0	3.7	18.6	5.3
	8	18.9	5.4	24.5	7.0	16.1	4.6	15.1	4.3	21.4	6.1

The nominal capacity is based on:

1. Evaporating Temperature  $T_e = 5^\circ\text{C}$ ; 2. Liquid Temperature  $T_l = 28^\circ\text{C}$ ;
3. Condensing Temperature  $T_c = 32^\circ\text{C}$ ; 4. Opening Superheat  $OS = 4\text{K}$

# Thermostatic Expansion Valve

## Ordering

### Range N, Adjustable Superheat, without check valve

Refrigerant	Model / Orifice No.	Connection Solder		Code No.
		Inlet xOutlet [in.]	Equalization [in.]	
R410A	TCCE 1	3/8x1/2	1/4	440080012100
	TCCE 2	3/8x1/2	1/4	440080012300
	TCCE 3	3/8x1/2	1/4	440080012200
	TCCE 4	3/8x1/2	1/4	440080012400
	TCCE 5	3/8x1/2	1/4	440080012500
	TCCE 6	1/2x5/8	1/4	440080012900
	TCCE 7	3/8x1/2	1/4	440080012700
	TCCE 8	1/2x5/8	1/4	440080013100
R22/R407C	TCCE 1	3/8x1/2	1/4	440080014900
	TCCE 2	3/8x1/2	1/4	440080015000
	TCCE 3	3/8x1/2	1/4	440080015100
	TCCE 4	3/8x1/2	1/4	440080015200
	TCCE 5	1/2x5/8	1/4	440080015300
	TCCE 6	1/2x5/8	1/4	440080015400
	TCCE 7	1/2x5/8	1/4	440080015500
	TCCE 8	1/2x5/8	1/4	440080015600

Code numbers listed above refer to standard series. For other requirements, please contact DunAn

## Ordering

### Range N, Adjustable Superheat, without check valve

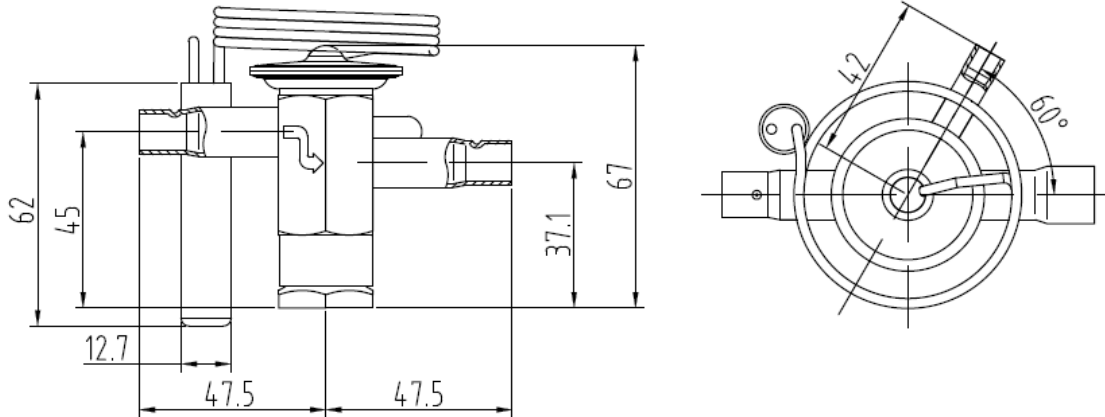
Refrigerant	Model / Orifice No.	Connection Solder		Code No.
		Inlet xOutlet [in.]	Equalization [in.]	
R410A	TCCE 1	3/8x1/2	1/4	440080001400
	TCCE 2	3/8x1/2	1/4	440080014000
	TCCE 3	3/8x1/2	1/4	440080001500
	TCCE 4	3/8x1/2	1/4	440080001600
	TCCE 5	3/8x1/2	1/4	440080014100
	TCCE 6	1/2x5/8	1/4	440080014200
	TCCE 7	3/8x1/2	1/4	440080014300
	TCCE 8	1/2x5/8	1/4	440080014400
R22/R407C	TCCE 1	3/8x1/2	1/4	440080014500
	TCCE 2	3/8x1/2	1/4	440080014600
	TCCE 3	3/8x1/2	1/4	440080014700
	TCCE 4	3/8x1/2	1/4	440080014800
	TCCE 5	1/2x5/8	1/4	440080015700
	TCCE 6	1/2x5/8	1/4	440080015800
	TCCE 7	1/2x5/8	1/4	440080015900
	TCCE 8	1/2x5/8	1/4	440080016000
R22/R407C	TCCE 1	3/8x1/2	1/4	440080016100
	TCCE 2	1/2x5/8	1/4	440080016200
	TCCE 3	1/2x5/8	1/4	440080016300
	TCCE 4	1/2x5/8	1/4	440080016400
	TCCE 5	3/8x1/2	1/4	440080016500
	TCCE 6	3/8x1/2	1/4	440080016600
	TCCE 7	3/8x1/2	1/4	440080016700
	TCCE 8	3/8x1/2	1/4	440080016800

Code numbers listed above refer to standard series. For other requirements, please contact DunAn

# Thermostatic Expansion Valve

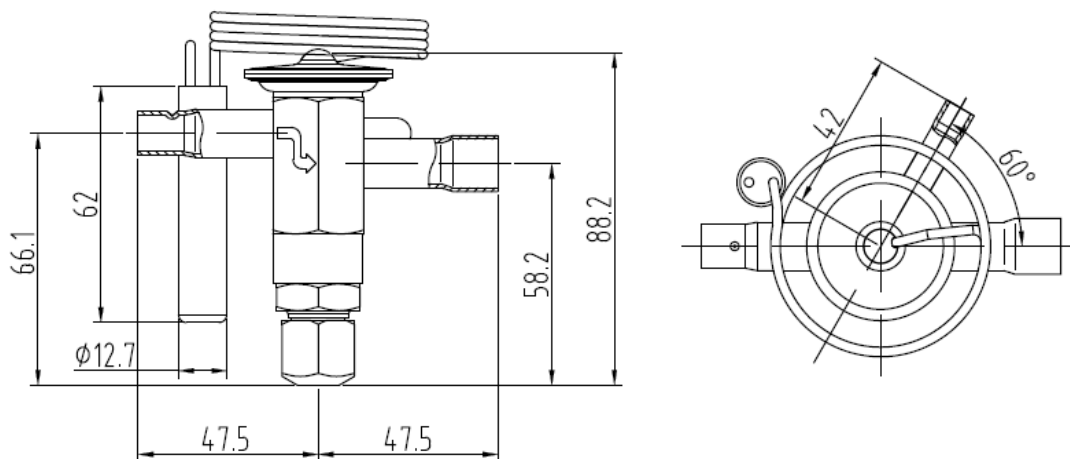
## Dimensions and weights

### Fixed setting



Weight Approx.: 0.32 kg

### Adjustable setting



Weight Approx.: 0.36 kg