

## TRAE Stretch Series Thermo™ - expansion valves

For AC, heat pumps, close control, industrial process cooling applications, and transportation AC with HP demand

### Features

- Hermetic valve with brazing connections
- Compact size design
- Compatible with R410A / R407C / R22 / R134a
- Maximum working pressure: 46.8 bar
- Bi-Flow application
  - Balanced port in normal and reverse flow directions eliminates disturbance forces resulting from condensing pressure
  - Optimum static superheat in normal and reverse flow
  - Capacities performance in normal and reverse flow correlates to capacity of heat pumps in cooling and heating mode
- Desired reverse superheat setting is much suitable for Heat Pump application in heating model.
- Stainless steel power element with special diaphragms design provides life expectancy against high pressure during reversed flow via external equalizer.



### Options

Special factory setting upon request

### Specifications

Maximum working pressure: 46.9 bar

### Technical data

Maximum working gauge pressure (bar)	46.8
Burst gauge pressure (bar)	234.4
Compatibility	R410A, R407C, R22, R134a

Connections	Copper
Capillary tube length (m)	1.5 (5Ft)
Power element	Stainless Steel
Gross weight (kg)	Approx. 0.50 ~ 0.53 kg (Depend on valve size)

Charge code	System refrig.	Maximum bulb temperature (°C)	Evaporating temperature range (°C)
HCA	R22	65	-29 ~ 10
HW100	R22	65	-46 ~ 10
NW100	R407C	65	-46 ~ 10
ZAA	R410A	65	-29 ~ 10
MC	R134a	65	-29 ~ 10

### R410A Selection table

Model	PCN	Capacity, R410A [Tons] <sup>1</sup>	Capacity, R410A [kW] <sup>2</sup>	Connection	
				Inlet × outlet	Equalizer
TRAE 8 ZAA	066797	8	32	5/8 × 7/8 ODF	1/4 ODF
TRAE 10 ZAA	066798	10	40	5/8 × 7/8 ODF	1/4 ODF
TRAE 12 ZAA	066799	12	48	5/8 × 7/8 ODF	1/4 ODF
TRAE 15 ZAA	066800	15	60	5/8 × 7/8 ODF	1/4 ODF
TRAE 15 ZAA	066801	15	60	5/8 × 1-1/8 ODF	1/4 ODF
TRAE 18 ZAA	066802	18	72	5/8 × 1-1/8 ODF	1/4 ODF

1. Nominal capacity is rated at 37.8°C liquid inlet and 4.4°C evap temperature; with 160 Psi pressure drop across TXV per ARI-750.

2. The nominal capacities are based +4°C dew point evaporating temperature, +38°C bubble point condensing temperature and 1K subcooling per Asercom standard.

\*See extended capacity tables for ratings at a wide range of conditions per Asercom standard.

## R407C Selection table

Model	PCN	Capacity, R410A [Tons] <sup>1</sup>	Capacity, R410A [kW] <sup>2</sup>	Connection	
				Inlet × outlet	Equalizer
TRAE 8 NW100	066790	8	36	5/8 × 7/8 ODF	1/4 ODF
TRAE 10 NW100	066791	10	46	5/8 × 7/8 ODF	1/4 ODF
TRAE 12 NW100	066792	12	55	5/8 × 7/8 ODF	1/4 ODF
TRAE 12 NW100	066793	12	55	5/8 × 7/8 ODF	1/4 ODF
TRAE 15 NW100	066794	15	68	5/8 × 1-1/8 ODF	1/4 ODF

1. Nominal capacity is rated at 37.8°C liquid inlet and 4.4°C evap temperature; with 160 Psi pressure drop across TXV per ARI-750.
2. The nominal capacities are based +4°C dew point evaporating temperature, +38°C bubble point (+43°C dew point) condensing temperature and 1K subcooling per Asercom standard.

\*See extended capacity tables for ratings at a wide range of conditions per Asercom standard.

## R22 Selection table

Model	PCN	Capacity, R410A [Tons] <sup>1</sup>	Capacity, R410A [kW] <sup>2</sup>	Connection	
				Inlet × outlet	Equalizer
TRAE 8 HCA	066780	8	32	5/8 × 7/8 ODF	1/4 ODF
TRAE 10 HCA	066781	10	40	5/8 × 7/8 ODF	1/4 ODF
TRAE 12 HCA	066782	12	48	5/8 × 7/8 ODF	1/4 ODF
TRAE 12 HCA	066783	12	48	5/8 × 1-1/8 ODF	1/4 ODF
TRAE 15 HCA	066784	15	61	5/8 × 1-1/8 ODF	1/4 ODF
TRAE 8 HW100	066785	8	32	5/8 × 7/8 ODF	1/4 ODF
TRAE 10 HW100	066786	10	40	5/8 × 7/8 ODF	1/4 ODF
TRAE 12 HW100	066787	12	48	5/8 × 7/8 ODF	1/4 ODF
TRAE 12 HW100	066788	12	48	5/8 × 1-1/8 ODF	1/4 ODF
TRAE 15 HW100	066789	15	61	5/8 × 1-1/8 ODF	1/4 ODF

1. Nominal capacity is rated at 37.8°C liquid inlet and 4.4°C evap temperature; with 160 Psi pressure drop across TXV per ARI-750.
2. The nominal capacities are based +4°C dew point evaporating temperature, +38°C bubble point (+43°C dew point) condensing temperature and 1K subcooling per Asercom standard.

\*See extended capacity tables for ratings at a wide range of conditions per Asercom standard.

## R134a Selection table

Model	PCN	Capacity, R410A [Tons] <sup>1</sup>	Capacity, R410A [kW] <sup>2</sup>	Connection	
				Inlet × outlet	Equalizer
TRAE 6 MC	067061	6	24	5/8 × 7/8 ODF	1/4 ODF
TRAE 7 MC	067062	7	28	5/8 × 7/8 ODF	1/4 ODF
TRAE 9 MC	067063	9	36	5/8 × 7/8 ODF	1/4 ODF
TRAE 9 MC	067064	9	36	5/8 × 1-1/8 ODF	1/4 ODF
TRAE 11 MC	067065	11	44	5/8 × 1-1/8 ODF	1/4 ODF

1. Nominal capacity is rated at 37.8°C liquid inlet and 4.4°C evap temperature; with 160 Psi pressure drop across TXV per ARI-750.
2. The nominal capacities are based +4°C dew point evaporating temperature, +38°C bubble point (+43°C dew point) condensing temperature and 1K subcooling per Asercom standard.

\*See extended capacity tables for ratings at a wide range of conditions per Asercom standard.