Why use a **capillary tube** when you can ensure **peak performance** with a TXV?



The Danfoss TD1 range of thermostatic expansion valves are designed for small commercial refrigeration applications. They have been proven to achieve energy savings and quicker pull-down time when compared to a capillary tube. Ensure your equipment runs at peak performance with a Danfoss TD1.





Incorporating Danfoss' proven, robust, stainless steel capillary tube and sensing bulb design, the TD1 features the patented Danfoss bulb strap to provide maximum heat transfer to the bulb for a fast and precise valve reaction to temperature changes in the evaporator and to ensure a secure bulb installation. The TD1 portfolio is UL approved and is available in a straight through configuration for refrigerants R-134a, R-404A, R-290, R-448A, R-449A, and R513a (additional refrigerants may be available upon request). The TD1 is suitable for many traditional applications, including those using capillary tubes, including: GDMs, Ice cream cabinets, small ice machines, refrigerated beverage dispensers, specialty cooling, transport refrigeration, reach-in fridges, small chillers, and small refrigeration units.

## **TD1/TDE1 Thermostatic Expansion Valves**

R-134a'									
Model no.	Capacity* in TR MBP	Capacity* in TR LBP	Orifice size	Range	Inlet size (in.)	Outlet size (in.)	Equalization size (in.)	Superheat	Danfoss Code no.
TD1-0 R134a	1⁄8	3/50	0						068N7671
TD1-1 R134a	1⁄5	1⁄10	1						068N7672
TD1-2 R134a	1⁄3	1⁄5	2						068N7673
TD1-3 R134a	1/2	1⁄3	3				_		068N7674
TD1-4 R134a	3⁄4	1/2	4	Ν	3⁄8	1/2		Adjustable	068N7675
TD1-5 R134a	1	1/2	5						068N7676
TDE1-3 R134a	1/2	1⁄3	3						068N7690
TDE1-4 R134a	3⁄4	1/2	4			1⁄4		068N7677	
TDE1-5 R134a	1	1/2	5						068N7678

R-404A

R-290

Model no.	Capacity* TR in MBP	Capacity* in TR LBP	Orifice size	Range	Inlet size (in.)	Outlet size (in.)	Equalization size (in.)	Superheat	Danfoss Code no.
TD1-0 R404A	1⁄4	1⁄10	0						068N7679
TD1-1 R404A	1/3	1⁄6	1			068N7680			
TD1-2 R404A	1/2	2/7	2						068N7663
TD1-3 R404A	2/3	1/2	3						068N7664
TD1-4 R404A	1	3⁄4	4	Ν	3/8	1/2		Adjustable	068N7665
TD1-5 R404A	1 1⁄2	3⁄4	5						068N7666
TDE1-3 R404A	2/3	1/2	3						068N7667
TDE1-4 R404A	1	3⁄4	4			1/4	1⁄4		068N7668
TDE1-5 R404A	1 1⁄2	7/8	5						068N7669

n-290									
Model no.	Capacity* in TR MBP	Capacity* in TR LBP	Orifice size	Range	Inlet size (in.)	Outlet size (in.)	Equalization size (in.)	Superheat	Danfoss Code no.
TD1-0 R290	1⁄4	1⁄8	0						068N7681
TD1-1 R290	1⁄3	1⁄5	1						068N7682
TD1-2 R290	1/2	3/8	2						068N7683
TD1-3 R290	3⁄4	1/2	3				_		068N7684
TD1-4 R290	1 1⁄4	3⁄4	4	Ν	3/8	1/2		Adjustable	068N7685
TD1-5 R290	2	1	5						068N7686
TDE1-3 R290	3⁄4	1/2	3						068N7687
TDE1-4 R290	1 1⁄4	3⁄4	4				1⁄4		068N7688
TDE1-5 R290	2	1	5						068N7689

\* The rated capacity is based on: Evaporating temp. Te = +41 °F MBP/–20 °F LBP / Condensing temp. Tc = +90 °F / Refrigerant temp. ahead of the value = +82 °F Range N: -40-+50 °F evaporating temperature. For refrigerants not listed here, please contact your Danfoss representative.

<sup>1</sup> Code Nos. also qualified for R-513a but capacities listed are for R-134a. See Coolsector<sup>®</sup>2 for exact capacities at your selected conditions.

## R-448A/R-449A

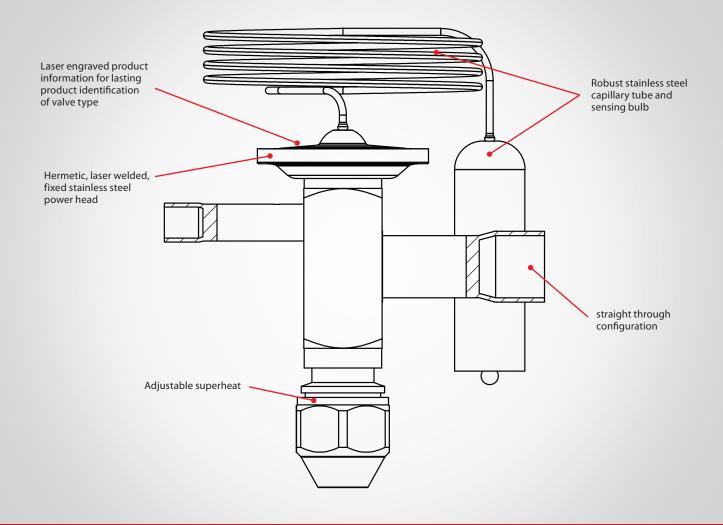
K-448A/K-449A									
Model no.	Capacity* in TR MBP	Capacity* in TR LBP	Orifice size	Range	Inlet size (in.)	Outlet size (in.)	Equalization size (in.)	Superheat	Danfoss Code no.
TD1-0 R448A/R449A	1⁄4	1⁄8	0						068N7691
TD1-1 R448A/R449A	1⁄3	1⁄5	1						068N7692
TD1-2 R448A/R449A	5⁄8	1⁄3	2						068N7693
TD1-3 R448A/R449A	3⁄4	2/3	3	 N 3⁄8 ½	_		068N7694		
TD1-4 R448A/R449A	1 1⁄4	3⁄4	4		3/8	1/2		Adjustable	068N7695
TD1-5 R448A/R449A	2 1⁄8	1 1⁄9	5						068N7696
TDE1-3 R448A/R449A	1	2/3	3				1/4		068N7697
TDE1-4 R448A/R449A	1 1⁄4	3⁄4	4						068N7698
TDE1-5 R448A/R449A	2 1/8	1 1⁄2	5					068N7699	

\*The rated capacity is based on:

Evaporating temp. Te = +41 °F MBP/-20 °F LBP Condensing temp. Tc = +90 °F Refrigerant temp. ahead of the value = +82 °F Range N: -40-+50 °F

## Spare Parts

Code no.	Description	Pack mode	Order multiple
068U3505	Bulb strap; 0.4 mm thick, max. 28 mm diameter tube	Industrial	45
068U3507	Bulb strap; 0.4 mm thick, max. 28 mm diameter tube	Single	1



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